

• JANUARY 1956

BUTANE-PROPANE *News*

FIFTY CENTS PER COPY

What's New for
1956?

•
L.P. Gas Sales
Surpass
6 Billion Gallons
For First Time

HEADQUARTERS FOR L.P. GAS INFORMATION SINCE 1931

Happy New Year 5 ways...
... when you **CONTRACT** with **ANCHOR**



1 wholesale only

Anchor has no retail outlets or financial interest in such outlets. Our only interest is in serving our contract customers better . . . a dependable supplier, never a competitor.

2 highest quality

Anchorgas is the best butane and propane. Every care is taken, in production, transportation and storage, to make certain that Anchorgas is the best fuel you can get, maintained at NGAA standards.

3 dependable supply

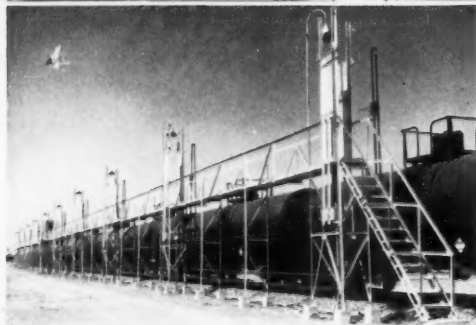
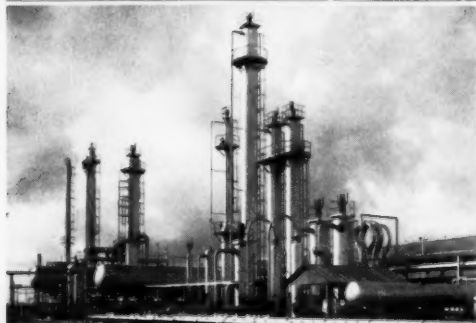
Anchor's many plants, huge fleet of tank cars and vast underground storage installations assure you of supplies of LPG through any season to meet your need.

4 specialized engineering service

Anchor now offers experienced engineering service with specialized knowledge of LPG problems and installations. This service is available to you for advice or complete planning and construction.

5 friendly help

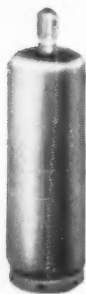
Anchor men have many years of experience in the LPG industry. They understand your problems, and can help. They'd like to hear from you—Call Tulsa 2-7261.



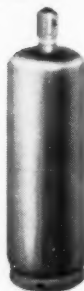
ANCHOR

PETROLEUM COMPANY • TULSA

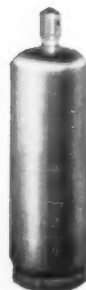
SALES OFFICES: Des Moines • Shreveport • Toledo • Houston • Long Beach
Oklahoma City • Midland, Tex. • Minneapolis • San Francisco • Seattle • Salt Lake City
East Patterson, N. J. • Hattiesburg, Miss. • Macon, Ga. • Calgary, Canada



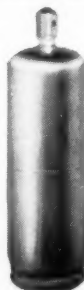
Specially prepared two-coat bottom head protection for extra corrosion resistance.



Two-piece construction for greater strength—less seam area.

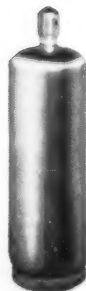


Curled foot ring hugs cylinder to form smooth, crack-free joint.



Automatic welds X-ray controlled for soundness and uniformity.

How to get the most in cylinder value



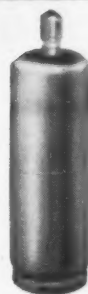
Easy on the eyes—thanks to smooth surfaces, streamlined shape.



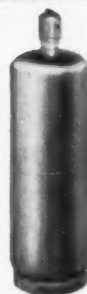
Light tare weight saves on your shipping and handling costs.



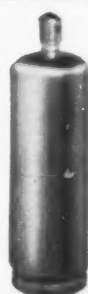
High-strength steel saves dead weight—resists handling bumps.



Extra sturdy foot ring—welded all the way around. Ventilated.



Each cylinder thoroughly cleaned and dried to save you trouble.



Depth-controlled stamping assures neat, easy-to-read markings.

... BUY HACKNEY!

Famous Hackney LP-Gas Cylinders are built to stay in service for twenty years *and more*. Look at your cylinder investment that way—and the popular RC-100A Hackney Cylinder costs you *less than ¼¢ per day!*

Send for your copy of our useful booklet, "See the Whole Picture—and Save!" It answers 40 questions you'll want to ask when buying new LP-gas cylinders.

Pressed Steel Tank Company

Manufacturer of Hackney Products

1487 S. 66th St., Milwaukee 14 • 52 Vanderbilt Avenue, Room 2099, New York 17
227 Hanna Bldg., Cleveland 15 • 936 W. Peachtree St., N.W., Room 112, Atlanta 3
208 S. LaSalle St., Room 790, Chicago 4 • 552 Roosevelt Bldg., Los Angeles 17
4550 Main St., Room 204, Kansas City 6, Mo. • 138 Wallace Ave., Downingtown, Pa.

Downingtown Iron Works, Inc., Division • Downingtown, Pennsylvania

LP-GAS CONTAINERS FROM ONE POUND TO 30,000 GALLONS





Table of Contents

Butane-Propane News

JANUARY 1956

Volume 18, Number 1

| | | | |
|--|----|--|-----|
| What's new? | 25 | Push button snow removal saves time and money | 88 |
| More than 100 of the outstanding appliances and equipment items were selected by the editors out of the thousands placed on the market in 1955. | | Would you like to know how to shovel snow without going outdoors? This is it. | |
| Marketed production of L. P. gas in 1955 — a 172% increase | 48 | Meters are a must | 90 |
|by George R. Benz, Paul W. Tucker, W. F. DeVoe | | If you can stand the cost of owning the equipment yourself, you can open the door to new opportunities in househeating with LPG. | |
| The Phillips report, a perennial classic gives an estimate of the year's progress months before the figures can be compiled by the Bureau of Mines. It has a remarkable record of hitting close to the bullseye. | | Written bid auction locates "live prospects" at low cost | 110 |
| Look for new highs in LPG sales again in '56 | 59 | The dealer can use this as a drawing card when he wants to bring crowds to his place of business for a grand opening, sale, etc. | |
| Our own research department checks the trends and points out unused opportunities for increasing "on the farm" sales. | | Propane heats low cost experimental hothouse | 114 |
| Gas is the safest fuel | 64 | Scientists are working on a greenhouse that will enable home gardeners to harvest their favorite vegetables, fruit, and flowers at any time of the year. | |
| The best answers to fallacious claims are facts. Here they are from the unimpeachable authority—NFPA. | | POWER SECTION | |
| Heroic achievements in operation cue feeding demonstration revealed | 66 | Propane pays in six ways for City Cab Co.by Carl Abell | 143 |
| Details of planning for last spring's mass feeding exercise add up to one of the most dramatic stories of the year. | | Midwestern taxi test confirms that LPG conversion is not an expense, but a profitable investment. | |
| How to appeal income taxes | 74 | Sub-zero refrigeration for two-day meat haul on propane | 146 |
| If the income tax man doesn't agree with your figures, your goose is not necessarily cooked. There are a lot of ways to appeal his rulings. | |by Gene C. Creighton | |
| It's profitable to put the local touch in your advertising | 80 | Propane-operated cold storage warehouse on wheels brings Denver steaks to Los Angeles and extra profits to shipper. | |
| Be the most civic-minded citizen in your town—participate in local events, and tie your advertising to local events. It pays! | | 80% of Transcold units operate on L. P. gas | 154 |
| Pete rebuffs a Texas norther — Episode No. 6 | 84 | Refrigeration must be dependable—LPG does it. | |
|by J. Arthur Thompson | | DEPARTMENTS | |
| The apostle of L. P. gas puts another pioneer in business by doing something about the weather. | | Advertisers Index | 158 |
| | | Association | 116 |
| | | Beyond the Mains | 23 |
| | | Calendar | 113 |
| | | Classified | 155 |
| | | Letters | 19 |
| | | News | 92 |
| | | Power | 141 |
| | | The Trade | 134 |

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YOU MAKE IT...

We underwrite it!

Resolved... that in 1956...

I WILL give my customers better service.

I WILL supply them with the highest quality fuel.

I WILL develop more summer business.

I WILL get more customers.

WARRENGAS *Dealer*

WARRENGAS
the Concentrated fuel

WARREN PETROLEUM CORPORATION

TULSA, OKLAHOMA

SALES OFFICES

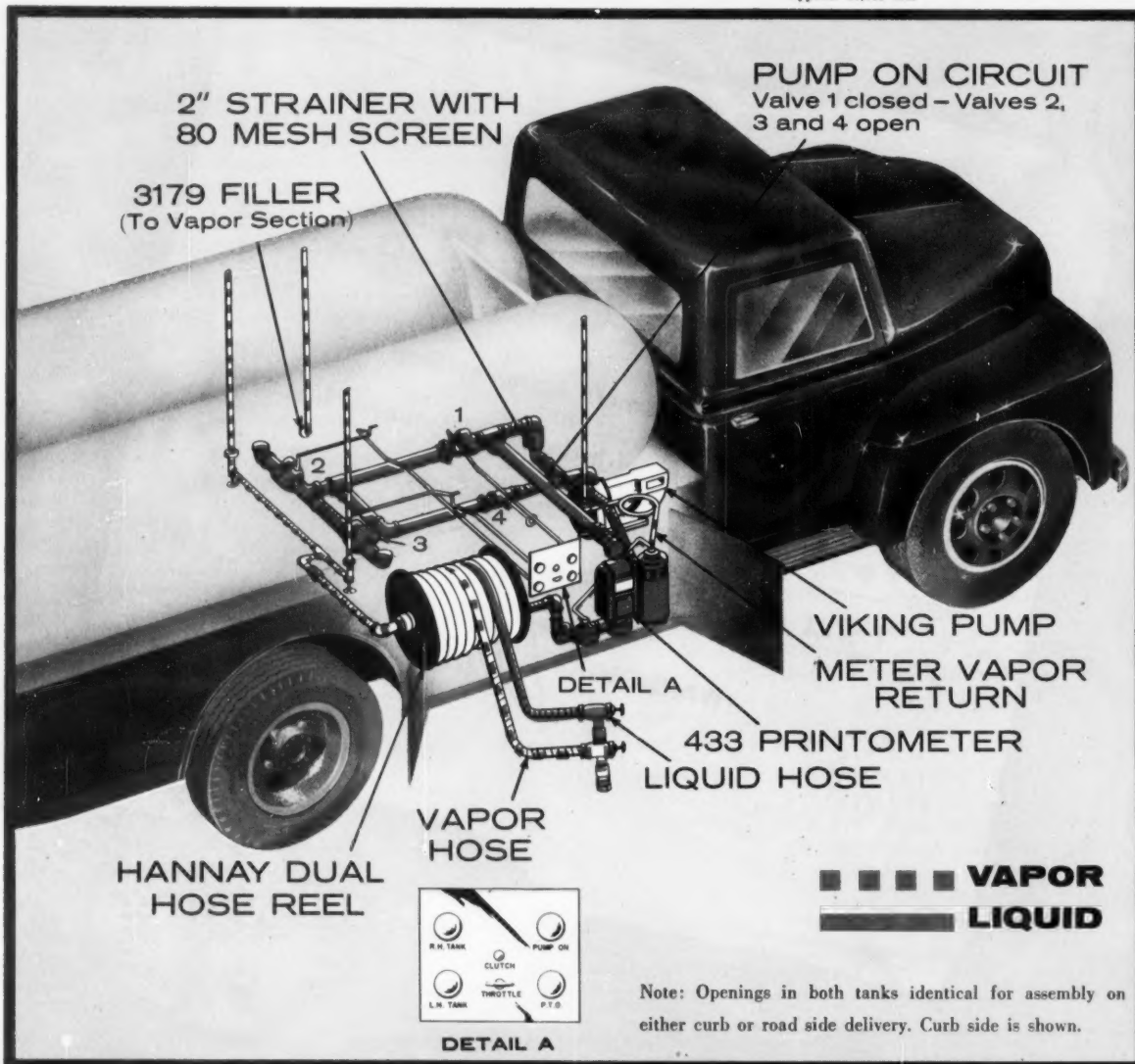
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TRINITY MEANS

Trinity Precision engineering gives you extra quality in whatever model truck tank you select to fit your needs. And that famous Trinity quality always pays off . . . in lower operating costs and bigger profits!



Twin Barrel Model No. 100. 2175 WG cap. 46" dia. 250# WP. Conventional chassis with gross loaded weight, of approx. 23,000 lbs.



the NEW TRINITY STORY

Write today for your beautiful 16-page booklet covering the entire Trinity line of truck tanks, storage tanks and transports



Congratulations to
LPGA on their
25th Anniversary

Trinity goes to Mexico

— TATSA —
Tanques-Acero Trinity
S. A. Calle Poniente
150-#734
Mexico 16, D.F.

3301 SOUTH LAMAR STREET

BUILT-IN QUALITY

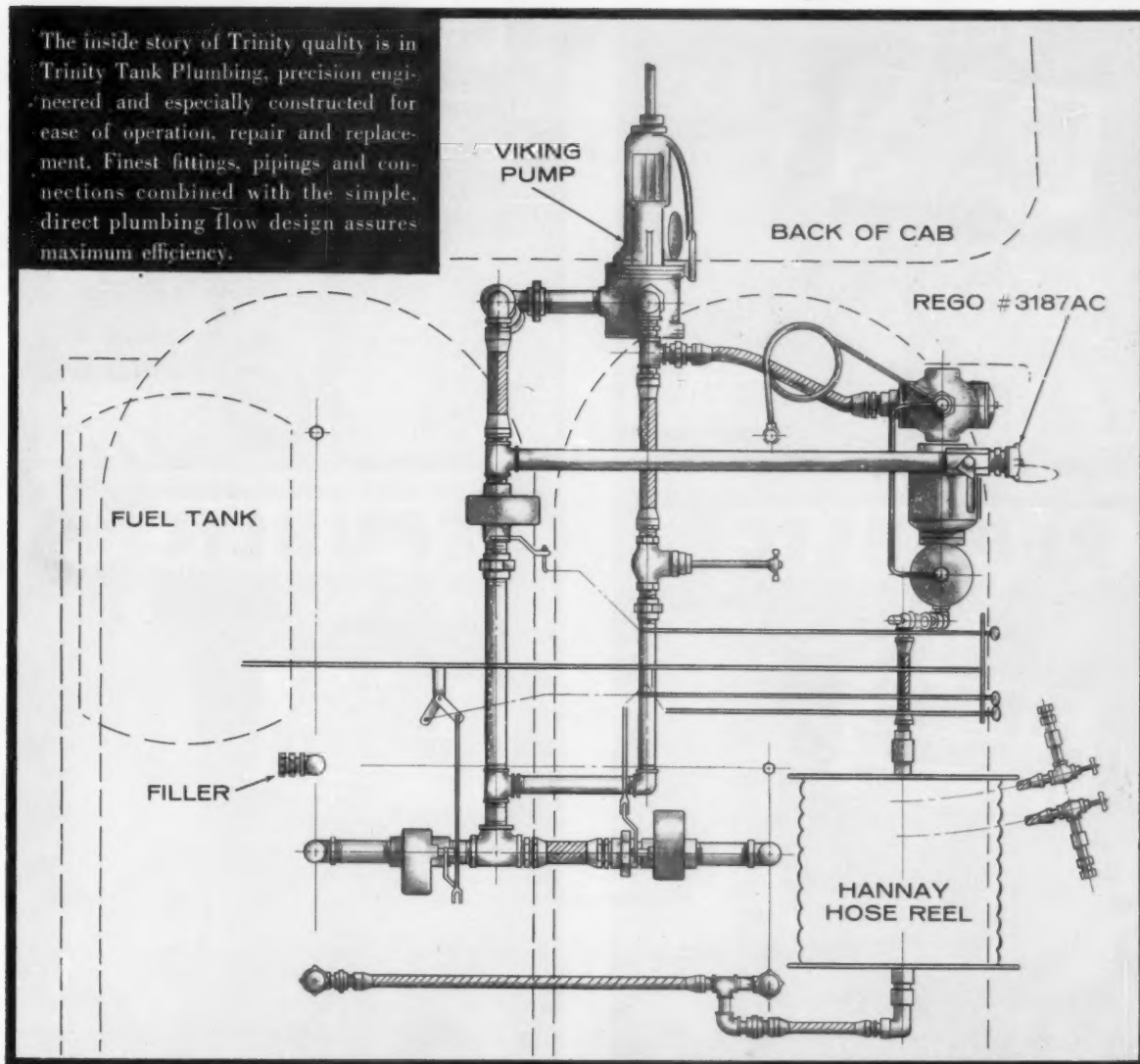


Trinity Model No. 106 cuts your operating costs, boosts profits because it was designed with LPG distributors needs in mind.

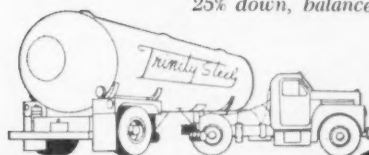


Trinity 6x7 "Neckdown Blimp" is fabricated approaching tank car capacity (legally). Lower center of gravity increases safety of operation.

The inside story of Trinity quality is in Trinity Tank Plumbing, precision engineered and especially constructed for ease of operation, repair and replacement. Finest fittings, pipings and connections combined with the simple, direct plumbing flow design assures maximum efficiency.



ASK US—about financing your new trucks,
25% down, balance monthly.



DALLAS, TEXAS

HA 8-8321

JANUARY, 1956

REPUBLIC



Thermo Glas

NEW MINI PILOT
NEW GOLD OR CHROME TRIM
100% SUPER THERMOSTAT CONTROLS
OWEN'S CORNING FIBERGLAS INSULATION
SUCCESSION TO ORDINARY WATER HEATERS
15 YEAR WARRANTY
REPUBLIC IS MORE THAN A NAME...IT'S A GUARANTEE!



| Model No. | 2 HP | 3 HP | 4 HP | 5 HP |
|--|----------------|----------------|----------------|----------------|
| Capacity in U.S. Gallons | 20 | 30 | 40 | 50 |
| Reheat Per Hr. 100° Rise in U.S. Gallons 100° Rise | 27.8 | 44.1 | 44.1 | 44.1 |
| Reheat Per Hr. 100° Rise | 27.8 | 44.1 | 44.1 | 44.1 |
| Reheat Rating B.T.U. Per Hr. | 27,800 | 31,000 | 31,000 | 31,000 |
| Size Gas Supply | 1/2" | 1/2" | 1/2" | 1/2" |
| Size Hot Water | 1/2" | 1/2" | 1/2" | 1/2" |
| Size Cold Water | 1/2" | 1/2" | 1/2" | 1/2" |
| Spread Hot and Cold Water | 8" | 8" | 8" | 8" |
| Vent Size | 3" | 3" | 3" | 3" |
| Color of Body | White | White | White | White |
| Color of Trim | Gold or Chrome | Gold or Chrome | Gold or Chrome | Gold or Chrome |

| Model No. | 2 HP | 3 HP | 4 HP | 5 HP |
|--|----------------|----------------|----------------|----------------|
| Capacity in U.S. Gallons | 20 | 30 | 40 | 50 |
| Reheat Per Hr. 100° Rise in U.S. Gallons 100° Rise | 27.8 | 44.1 | 44.1 | 44.1 |
| Reheat Per Hr. 100° Rise | 27.8 | 44.1 | 44.1 | 44.1 |
| Reheat Rating B.T.U. Per Hr. | 27,800 | 31,000 | 31,000 | 31,000 |
| Size Gas Supply | 1/2" | 1/2" | 1/2" | 1/2" |
| Size Hot Water | 1/2" | 1/2" | 1/2" | 1/2" |
| Size Cold Water | 1/2" | 1/2" | 1/2" | 1/2" |
| Spread Hot and Cold Water | 8" | 8" | 8" | 8" |
| Vent Size | 3" | 3" | 3" | 3" |
| Color of Body | White | White | White | White |
| Color of Trim | Gold or Chrome | Gold or Chrome | Gold or Chrome | Gold or Chrome |

ROUGH-IN SPECIFICATIONS

REPUBLIC



Thermo Glas

SUPER-GLASS LINED
NEW GOLD OR CHROME TRIM

10 YEAR WARRANTY
REPUBLIC IS MORE THAN A NAME...IT'S A GUARANTEE!



| Model No. | 2 HP | 3 HP | 4 HP | 5 HP |
|--|----------------|----------------|----------------|----------------|
| Capacity in U.S. Gallons | 20 | 30 | 40 | 50 |
| Reheat Per Hr. 100° Rise in U.S. Gallons 100° Rise | 27.8 | 44.1 | 44.1 | 44.1 |
| Reheat Per Hr. 100° Rise | 27.8 | 44.1 | 44.1 | 44.1 |
| Reheat Rating B.T.U. Per Hr. | 27,800 | 31,000 | 31,000 | 31,000 |
| Size Gas Supply | 1/2" | 1/2" | 1/2" | 1/2" |
| Size Hot Water | 1/2" | 1/2" | 1/2" | 1/2" |
| Size Cold Water | 1/2" | 1/2" | 1/2" | 1/2" |
| Spread Hot and Cold Water | 8" | 8" | 8" | 8" |
| Vent Size | 3" | 3" | 3" | 3" |
| Color of Body | White | White | White | White |
| Color of Trim | Gold or Chrome | Gold or Chrome | Gold or Chrome | Gold or Chrome |

| Model No. | 2 HP | 3 HP | 4 HP | 5 HP |
|--|----------------|----------------|----------------|----------------|
| Capacity in U.S. Gallons | 20 | 30 | 40 | 50 |
| Reheat Per Hr. 100° Rise in U.S. Gallons 100° Rise | 27.8 | 44.1 | 44.1 | 44.1 |
| Reheat Per Hr. 100° Rise | 27.8 | 44.1 | 44.1 | 44.1 |
| Reheat Rating B.T.U. Per Hr. | 27,800 | 31,000 | 31,000 | 31,000 |
| Size Gas Supply | 1/2" | 1/2" | 1/2" | 1/2" |
| Size Hot Water | 1/2" | 1/2" | 1/2" | 1/2" |
| Size Cold Water | 1/2" | 1/2" | 1/2" | 1/2" |
| Spread Hot and Cold Water | 8" | 8" | 8" | 8" |
| Vent Size | 3" | 3" | 3" | 3" |
| Color of Body | White | White | White | White |
| Color of Trim | Gold or Chrome | Gold or Chrome | Gold or Chrome | Gold or Chrome |

ROUGH-IN SPECIFICATIONS

REPUBLIC



NEW STANDARD MODEL

3 YEAR WARRANTY
REPUBLIC IS MORE THAN A NAME...IT'S A GUARANTEE!



NEW WHITE & GRAY TRIM
100% THERMOSTAT CONTROLS
NEW HIGH RECOVERY
OWEN'S CORNING FIBERGLAS INSULATION
BUILT LIKE A BATTLESHIP
A.C.A. APPROVED

BUILT-IN PILOT FILTER



F.N.A. & V.A. Approved
NEW STANDARD MODEL
3 YEAR WARRANTY

| Model No. | 2005 | 2005 | 4005 | 5005 |
|--|--------------|--------------|--------------|--------------|
| Capacity in U.S. Gallons | 20 | 30 | 40 | 50 |
| Reheat Per Hr. 100° Rise in U.S. Gallons 100° Rise | 27.8 | 44.1 | 44.1 | 44.1 |
| Reheat Per Hr. 100° Rise | 27.8 | 44.1 | 44.1 | 44.1 |
| Reheat Rating B.T.U. Per Hr. | 27,800 | 31,000 | 31,000 | 31,000 |
| Size Gas Supply | 1/2" | 1/2" | 1/2" | 1/2" |
| Size Hot and Cold Water | 1/2" | 1/2" | 1/2" | 1/2" |
| Spread Hot and Cold Water | 8" | 8" | 8" | 8" |
| Vent Size | 3" | 3" | 3" | 3" |
| Color of Body | White | White | White | White |
| Color of Trim | White & Gray | White & Gray | White & Gray | White & Gray |

| Model No. | A | B | C | D | E | F |
|--|--------------|--------------|--------------|--------------|--------------|--------------|
| Capacity in U.S. Gallons | 20 | 30 | 40 | 50 | 60 | 70 |
| Reheat Per Hr. 100° Rise in U.S. Gallons 100° Rise | 27.8 | 44.1 | 44.1 | 44.1 | 44.1 | 44.1 |
| Reheat Per Hr. 100° Rise | 27.8 | 44.1 | 44.1 | 44.1 | 44.1 | 44.1 |
| Reheat Rating B.T.U. Per Hr. | 27,800 | 31,000 | 31,000 | 31,000 | 31,000 | 31,000 |
| Size Gas Supply | 1/2" | 1/2" | 1/2" | 1/2" | 1/2" | 1/2" |
| Size Hot and Cold Water | 1/2" | 1/2" | 1/2" | 1/2" | 1/2" | 1/2" |
| Spread Hot and Cold Water | 8" | 8" | 8" | 8" | 8" | 8" |
| Vent Size | 3" | 3" | 3" | 3" | 3" | 3" |
| Color of Body | White | White | White | White | White | White |
| Color of Trim | White & Gray | White & Gray | White & Gray | White & Gray | White & Gray | White & Gray |

REPUBLIC



SPECIAL MODEL

1 YEAR WARRANTY
REPUBLIC IS MORE THAN A NAME...IT'S A GUARANTEE!



A.C.A. APPROVED
NEW WHITE & GRAY TRIM
100% THERMOSTAT CONTROLS
NEW HIGH RECOVERY
OWEN'S CORNING FIBERGLAS INSULATION
BUILT LIKE A BATTLESHIP
A.C.A. APPROVED

BUILT-IN PILOT FILTER



| Model No. | 2005 | 2005 | 4005 | 5005 |
|--|--------------|--------------|--------------|--------------|
| Capacity in U.S. Gallons | 20 | 30 | 40 | 50 |
| Reheat Per Hr. 100° Rise in U.S. Gallons 100° Rise | 27.8 | 44.1 | 44.1 | 44.1 |
| Reheat Per Hr. 100° Rise | 27.8 | 44.1 | 44.1 | 44.1 |
| Reheat Rating B.T.U. Per Hr. | 27,800 | 31,000 | 31,000 | 31,000 |
| Size Gas Supply | 1/2" | 1/2" | 1/2" | 1/2" |
| Size Hot and Cold Water | 1/2" | 1/2" | 1/2" | 1/2" |
| Spread Hot and Cold Water | 8" | 8" | 8" | 8" |
| Vent Size | 3" | 3" | 3" | 3" |
| Color of Body | White | White | White | White |
| Color of Trim | White & Gray | White & Gray | White & Gray | White & Gray |

| Model No. | A | B | C | D | E | F |
|--|--------------|--------------|--------------|--------------|--------------|--------------|
| Capacity in U.S. Gallons | 20 | 30 | 40 | 50 | 60 | 70 |
| Reheat Per Hr. 100° Rise in U.S. Gallons 100° Rise | 27.8 | 44.1 | 44.1 | 44.1 | 44.1 | 44.1 |
| Reheat Per Hr. 100° Rise | 27.8 | 44.1 | 44.1 | 44.1 | 44.1 | 44.1 |
| Reheat Rating B.T.U. Per Hr. | 27,800 | 31,000 | 31,000 | 31,000 | 31,000 | 31,000 |
| Size Gas Supply | 1/2" | 1/2" | 1/2" | 1/2" | 1/2" | 1/2" |
| Size Hot and Cold Water | 1/2" | 1/2" | 1/2" | 1/2" | 1/2" | 1/2" |
| Spread Hot and Cold Water | 8" | 8" | 8" | 8" | 8" | 8" |
| Vent Size | 3" | 3" | 3" | 3" | 3" | 3" |
| Color of Body | White | White | White | White | White | White |
| Color of Trim | White & Gray | White & Gray | White & Gray | White & Gray | White & Gray | White & Gray |

HUNTINGTON PARK, CALIF.
& ERIE, PENN.

REPUBLIC HEATER DIVISION

OF ODIN STOVE
MANUFACTURING CO.

REPUBLIC IS MORE THAN A NAME...IT'S A GUARANTEE!

REPUBLIC

SUPER DELUXE MODEL

10 YEAR WARRANTY
REPUBLIC IS MORE THAN A NAME
...IT'S A GUARANTEE!

A.G.A. APPROVED



THAS has got it!

NEW GOLD OR CHROME TRIM

100% THERMOSTAT CONTROLS

NEW HIGH RECOVERY

OWENS CORNING FIBERGLASS INSULATION

BUILT LIKE A BATTLESHIP

A.G.A. APPROVED

SUPER DELUXE MODEL 10 YEAR WARRANTY

| Model No. | 3 LHD | 3 LHD | 4 LHD | 5 LHD |
|--|--------|--------|--------|--------|
| Capacity in U.S. Gallons | 30 | 30 | 40 | 50 |
| Reheat Per Hr. 60" rise in U.S. Gallons 100° rise | 37.8 | 44.1 | 44.1 | 44.1 |
| Reheat Per Hr. 100° rise in U.S. Gallons 100° rise | 32.7 | 38.2 | 38.2 | 38.2 |
| Warmer Rating B.T.U. Per Hr. | 27,000 | 31,000 | 31,000 | 31,000 |
| Size Gas Supply | 1/2" | 1/2" | 1/2" | 1/2" |
| Size Hot Water | 1/2" | 1/2" | 1/2" | 1/2" |
| Size Cold Water | 1/2" | 1/2" | 1/2" | 1/2" |
| Spread Hot & Cold Water | 8" | 8" | 8" | 8" |
| Vent Size | 2" | 2" | 2" | 2" |
| Color of Body | White | White | White | White |
| Color of Trim | Chrome | Chrome | Chrome | Chrome |

Available for LP gas at no extra charge.
GRAYSON or GENERAL CONTROLS Optional
Depending on Availability



SUPER DELUXE MODEL

BUILT-IN PILOT FILTER

ROUGH-IN SPECIFICATIONS

| MODEL | A | B | C | D | E | F |
|-------|---------|---------|---------|---------|---------|--------|
| 30 | 54 1/2" | 55 1/2" | 60 1/2" | 14 1/2" | 17 1/2" | 4 1/2" |
| 40 | 57 1/2" | 58 1/2" | 63 1/2" | 14 1/2" | 17 1/2" | 4 1/2" |
| 50 | 60 1/2" | 61 1/2" | 66 1/2" | 14 1/2" | 17 1/2" | 4 1/2" |

REPUBLIC

DELUXE MODEL

5 YEAR WARRANTY
REPUBLIC IS MORE THAN A NAME
...IT'S A GUARANTEE!

FOR HOT WATER MADE

OWENS CORNING FIBERGLASS INSULATION

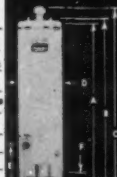
BUILT LIKE A BATTLESHIP

A.G.A. APPROVED

DELUXE MODEL 5 YEAR WARRANTY

| Model No. | 3 LHD | 3 LHD | 4 LHD | 5 LHD |
|--|--------|--------|--------|--------|
| Capacity in U.S. Gallons | 30 | 30 | 40 | 50 |
| Reheat Per Hr. 60" rise in U.S. Gallons 100° rise | 37.8 | 44.1 | 44.1 | 44.1 |
| Reheat Per Hr. 100° rise in U.S. Gallons 100° rise | 32.7 | 38.2 | 38.2 | 38.2 |
| Warmer Rating B.T.U. Per Hr. | 27,000 | 31,000 | 31,000 | 31,000 |
| Size Gas Supply | 1/2" | 1/2" | 1/2" | 1/2" |
| Size Hot Water | 1/2" | 1/2" | 1/2" | 1/2" |
| Size Cold Water | 1/2" | 1/2" | 1/2" | 1/2" |
| Spread Hot & Cold Water | 8" | 8" | 8" | 8" |
| Vent Size | 2" | 2" | 2" | 2" |
| Color of Body | White | White | White | White |
| Color of Trim | Chrome | Chrome | Chrome | Chrome |

Available for LP gas at no extra charge.
GRAYSON or GENERAL CONTROLS Optional
Depending on Availability



NEW MINI PILOT

BUILT-IN PILOT FILTER

| MODEL | A | B | C | D | E | F |
|-------|---------|---------|---------|---------|---------|--------|
| 30 | 54 1/2" | 55 1/2" | 60 1/2" | 14 1/2" | 17 1/2" | 4 1/2" |
| 40 | 57 1/2" | 58 1/2" | 63 1/2" | 14 1/2" | 17 1/2" | 4 1/2" |
| 50 | 60 1/2" | 61 1/2" | 66 1/2" | 14 1/2" | 17 1/2" | 4 1/2" |

REPUBLIC

STUBBY NEW STANDARD THERMOGLAS 10 YEAR WARRANTY

Thermo Glas



SUCCESSOR TO ORDINARY WATER HEATERS

REPUBLIC IS MORE THAN A NAME
...IT'S A GUARANTEE!

SUPER GLASS LINED
RUST PROOF
COLD OR CHROME TRIM
STURDY CONSTRUCTION

NEW MINI PILOT

GRAYSON or GENERAL CONTROLS

OWENS CORNING FIBERGLASS INSULATION

BUILT LIKE A BATTLESHIP

A.G.A. APPROVED

DUPONT DULUX EXTERIOR FINISH

WHITE AND CHROME TRIM

COPPER BEARING EXTRA HEAVY STEEL GALVANIZED

STURDY CONSTRUCTION

NEW MINI PILOT

GRAYSON or GENERAL CONTROLS

OWENS CORNING FIBERGLASS INSULATION

BUILT LIKE A BATTLESHIP

A.G.A. APPROVED

DUPONT DULUX EXTERIOR FINISH

WHITE AND CHROME TRIM

COPPER BEARING EXTRA HEAVY STEEL GALVANIZED

STURDY CONSTRUCTION

NEW MINI PILOT

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OWENS CORNING FIBERGLASS INSULATION

BUILT LIKE A BATTLESHIP

A.G.A. APPROVED

DUPONT DULUX EXTERIOR FINISH

WHITE AND CHROME TRIM

COPPER BEARING EXTRA HEAVY STEEL GALVANIZED

STURDY CONSTRUCTION

STUBBY DELUXE 5 YEAR WARRANTY



| Model No. | 2-1/2 | 3-1/2 | 4-1/2 |
|--|--------|--------|--------|
| Capacity in U.S. Gallons | 20 | 30 | 40 |
| Reheat Per Hr. 60" rise in U.S. Gallons 100° rise | 30.8 | 38.2 | 42 |
| Reheat Per Hr. 100° rise in U.S. Gallons 100° rise | 18.3 | 23.3 | 25.2 |
| Warmer Rating B.T.U. Per Hr. | 22,000 | 28,000 | 30,000 |
| Reheat Per Hr. 60" rise in U.S. Gallons 100° rise | 30.8 | 38.2 | 42 |
| Reheat Per Hr. 100° rise in U.S. Gallons 100° rise | 18.3 | 23.3 | 25.2 |
| Warmer Rating B.T.U. Per Hr. | 22,000 | 28,000 | 30,000 |
| Size Gas Supply | 1/2" | 1/2" | 1/2" |
| Size Hot Water | 1/2" | 1/2" | 1/2" |
| Size Cold Water | 1/2" | 1/2" | 1/2" |
| Spread Hot & Cold Water | 8" | 8" | 8" |
| Vent Size | 2" | 2" | 2" |
| Color of Body | White | White | White |
| Color of Trim | White | White | White |

No extra charge for LP gas.

REPUBLIC

EXTRA HI RECOVERY

THE PERFECT UNIT WHERE LARGE QUANTITIES OF CONSTANT HOT WATER IS REQUIRED
SCHOOLS
HOTELS
RESTAURANTS
APARTMENTS
LODGING HOUSES

100% AUTOMATIC THERMOSTAT CONTROLS

NEW MINI PILOT

GRAYSON or GENERAL CONTROLS

OWENS CORNING FIBERGLASS INSULATION

BUILT LIKE A BATTLESHIP

A.G.A. APPROVED

DUPONT DULUX EXTERIOR FINISH

WHITE AND CHROME TRIM

COPPER BEARING EXTRA HEAVY STEEL GALVANIZED

STURDY CONSTRUCTION

NEW MINI PILOT

GRAYSON or GENERAL CONTROLS

OWENS CORNING FIBERGLASS INSULATION

BUILT LIKE A BATTLESHIP

A.G.A. APPROVED

DUPONT DULUX EXTERIOR FINISH

WHITE AND CHROME TRIM

COPPER BEARING EXTRA HEAVY STEEL GALVANIZED

STURDY CONSTRUCTION

NEW MINI PILOT

GRAYSON or GENERAL CONTROLS

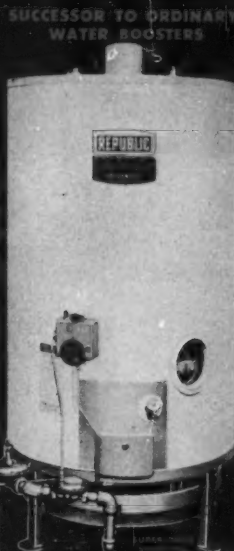
OWENS CORNING FIBERGLASS INSULATION

BUILT LIKE A BATTLESHIP

A.G.A. APPROVED

DUPONT DULUX EXTERIOR FINISH

WHITE AND CHROME TRIM



PRESSURE REGULATOR AND DIAPHRAGM VALVE

| MODEL | A | B | C | D | E | F |
|---------|-----|---------|---------|---------|---------|--------|
| No. 100 | 54" | 55 1/2" | 60 1/2" | 14 1/2" | 17 1/2" | 4 1/2" |
| No. 200 | 54" | 55 1/2" | 60 1/2" | 14 1/2" | 17 1/2" | 4 1/2" |

SUPER DUTY BOOSTERS

180 GALS. PER HOUR
252 GALS. PER HOUR

COMPACT ONLY 58" HIGH

EXCLUSIVE HAND-HOLE CLEANOUT

EXTRA HEAVY COPPER BEARING STEEL WITH EXTRA HEAVY GALVANIZED STURDY CONSTRUCTION

NEW MINI PILOT

GRAYSON or GENERAL CONTROLS

OWENS CORNING FIBERGLASS INSULATION

BUILT LIKE A BATTLESHIP

A.G.A. APPROVED

DUPONT DULUX EXTERIOR FINISH

WHITE AND CHROME TRIM

COPPER BEARING EXTRA HEAVY STEEL GALVANIZED

STURDY CONSTRUCTION

NEW MINI PILOT

GRAYSON or GENERAL CONTROLS

OWENS CORNING FIBERGLASS INSULATION

BUILT LIKE A BATTLESHIP

A.G.A. APPROVED

DUPONT DULUX EXTERIOR FINISH

WHITE AND CHROME TRIM

COPPER BEARING EXTRA HEAVY STEEL GALVANIZED

STURDY CONSTRUCTION

NEW MINI PILOT

GRAYSON or GENERAL CONTROLS

OWENS CORNING FIBERGLASS INSULATION

BUILT LIKE A BATTLESHIP

A.G.A. APPROVED

| Model No. | No. 100 | No. 200 |
|--|---------|---------|
| Capacity in U.S. Gallons | 100 | 200 |
| Reheat Per Hr. 60" rise in U.S. Gallons 100° rise | 100.0 | 192.0 |
| Reheat Per Hr. 100° rise in U.S. Gallons 100° rise | 100.0 | 192.0 |
| Warmer Rating B.T.U. Per Hr. | 120,000 | 192,000 |
| Size Gas Supply | 1/2" | 1/2" |
| Size Hot & Cold Water | 2" | 2" |
| Spread Hot & Cold Water | 8" | 8" |
| Vent Size | 8" | 8" |
| Color of Body | White | White |
| Color of Trim | Gray | Gray |

HUNTINGTON PARK, CALIF.
& ERIE, PENN.

REPUBLIC HEATER DIVISION

OF ODIN STOVE
MANUFACTURING CO.

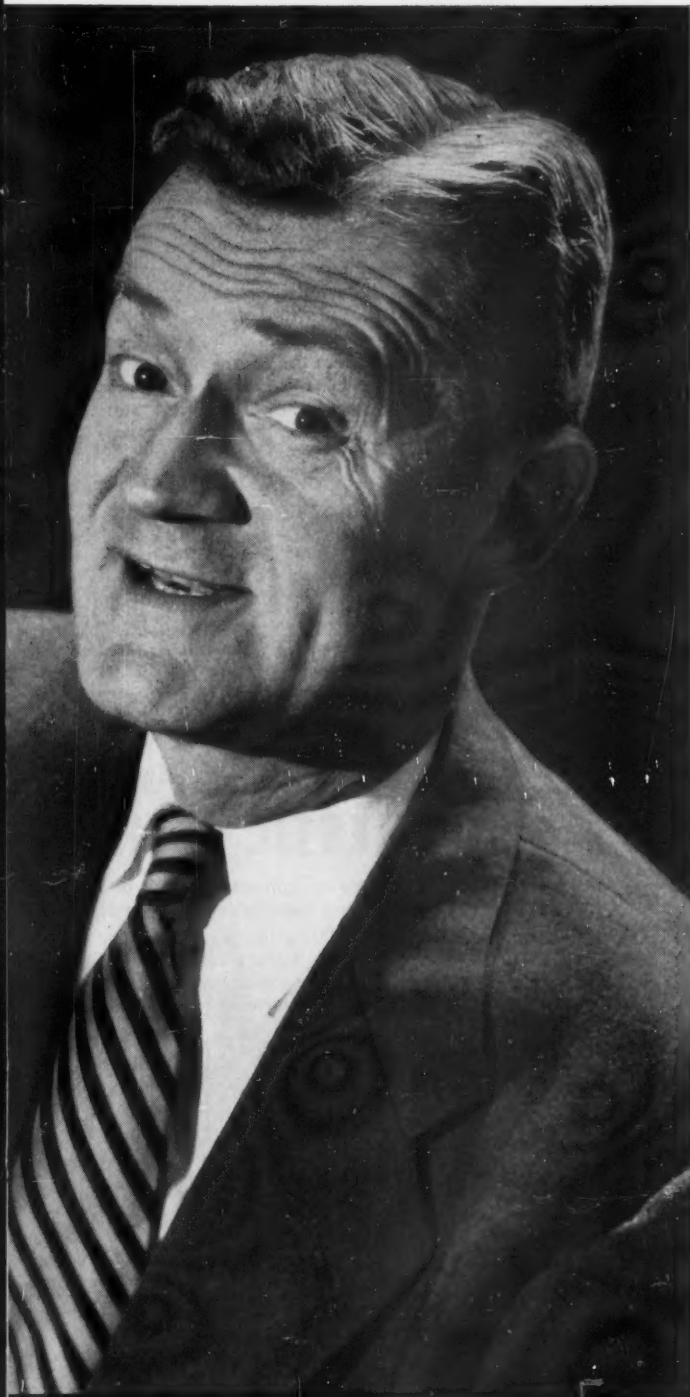
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FULL LINE
simplify
your selling!

Why don't you join American-Standard's dealer profit program?



You can find the right type and size of unit in a jiffy. American-Standard's color-coded speed-indexed catalog is Copyright 1955 by American Radiator & Standard Sanitary Corporation

the industry's easiest to use. See, also, American-Standard's powerful new line-up of advertising-merchandising aids.



Warm air heating and air conditioning jobs are easier to plan . . . simpler to sell . . . when you specialize in the installation of *American-Standard* equipment.

Famous name! Synonymous with fine quality and fair prices. You get your order signed faster . . . have more time for more sales.

The American-Standard line is *complete* . . . offers exactly the right unit for every type of installation.

WARM AIR HEATING: Basement, utility, counterflow and horizontal models . . . full range of capacities.

SUMMER AIR CONDITIONING: Add-on units, residential and commercial blower-equipped units, and new outdoor *air-cooled* units with vertical, counterflow, horizontal air-flow or blower-equipped evaporators.

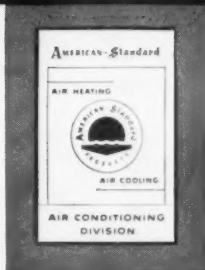
YEAR'ROUND AIR CONDITIONING: Eleven heating-cooling size combinations equipped for gas or oil-fired heating. Electrostatic air filtering units for every size and type of application. Just pick up your phone—your nearby American-Standard Air Conditioning Distributor is ready to give you fast service. Call him right now for full details about—

Indoor Weather-Conditioning
TRADEMARK

UNITS BY AMERICAN-STANDARD

EVERYTHING for
air conditioned comfort

Warm Air Heating
Summer Cooling
Year 'round Units
Electrostatic Air Filters



AMERICAN-Standard
AIR CONDITIONING DIVISION

ELYRIA, OHIO

American Radiator & Standard Sanitary Corporation

MAKING IT POSSIBLE FOR EXPAND AS THEY GREW



Some of today's largest users of Nor-Tex products bought their first tank and delivery unit from us years ago. Many times, when storage and delivery requirements increased, the methods and tanks we suggested proved out, permitting normal, uninterrupted growth at a minimum cost. With the building and supervision of Nor-Tex tanks entirely in the hands of men with years of bulk plant experience one can more accurately determine the right size tanks and the safe prices to pay to assure a profitable operation for the dealer. This bulk plant experience has resulted in many helpful, time-saving "extras" that have won Nor-Tex many customer friends.

STANDARD TWIN

Business small? Just getting started? Wherever you are located, the Nor-Tex Standard Twin is your best buy! This streamlined twin unit (1200 thru 2400 WG) is completely piped and ready to use with Viking mechanical seal pump, 50' filler hose, ICC lights, P.T.O. and splines jack shaft. A complete "Package Unit."

DE LUXE TWIN

Here is the choice of the fleet owner! It is the finest looking unit on the road with plenty of big, roomy cabinet space. It is a complete unit (1200 thru 2400 WG) with Viking mechanical seal pump, 50' filler hose, ICC lights, P.T.O., splines jack shaft and it is all piped and ready to use. A complete "Package Unit."

EXTRA SAVINGS on Complete

Buy one or a truckload.

POPULAR **Nor-Tex** STAR DOMESTIC TANKS

Each tank is fabricated to rigid specifications by men with years of domestic tank installation experience.

They're double tested . . . "Built to Last a Lifetime." They meet all national, state and local requirements. It is the safest, finest quality tank you can buy! Smoothly finished and aluminum painted over red oxide. Complete satisfaction guaranteed.

Balance
Your Load
the
Nor-Tex Way

Finance the
Balance



Immediate
Delivery

Manufacturers of Fine LPG Equipment

Whatever your needs in LPG equipment there is a factory tailored Nor-Tex unit ready for you! We manufacture LPG Truck and Transport Tanks, and we are truck distributors. We manufacture all types of LPG Tractor and Motor Fuel Tanks, Portable LPG Filling Stations and Trailer Tanks, LPG Storage and Domestic Tanks, Farm Carts and Anhydrous Ammonia Tanks, all built by men with years of Butane-Propane bulk plant experience. Phone, wire or write us. Interested attention, experienced assistance and helpful suggestions are always yours for the asking.

NORTH

P. O. BOX 1219

MANY LP-G DEALERS TO BUILT THIS BUSINESS

Nor-Tex Units Earn More! Cost Less! Do the Job Quicker and Easier!

"Biggest LP-G Year Ever Ahead," is the report from everywhere. Slash delivery costs with Nor-Tex High Flow Piping Units! Perfectly Balanced! Famous for loading and delivering LP-Gas faster!

PAYLOAD SPECIAL

Get immediate delivery on this internationally popular Nor-Tex twin and save money, too! It has everything you need in sizes from 1200 thru 2400 WG. Viking mechanical seal pump, 50' filler hose, ICC lights, P.T.O., splines jack shaft and it is completely piped and ready to use. A complete "Package Unit." (Model illustrated.)



AUTHORIZED TRUCK DISTRIBUTORS

Nor-Tex PIPE-IT-YOURSELF "Package Units" — Nothing More To Buy!

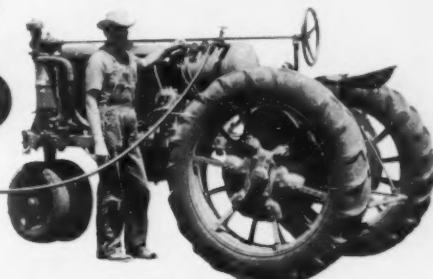
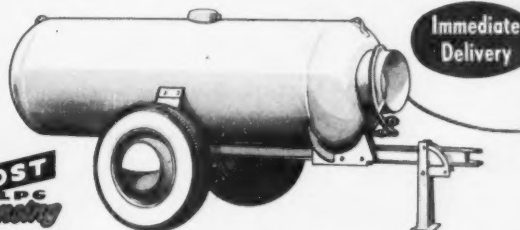
Nor-Tex FARM CART—Spots Your Fuel Where You Need It

Farmers save many hours by placing their fuel supply right where they need it with the well-baffled Nor-Tex Farm Cart. It is completely safe and easy to "spot" with car, truck or tractor. Complete with recessed relief valve, 12½' delivery hose, ¾" OIC valve and hose coupling. Mounted on a heavy duty axle with standard Chevrolet hub and 15" wheels. Sturdy I-beam tongue.

NOTE: All Nor-Tex Star Domestic Tanks of 500 WG or more include a convenient liquid line outlet for wet line connection to tractor fuel tank.



Nor-Tex LOW COST LP-G Financing
A PLAN TO MEET EVERY NEED!



Make It Easy and Convenient for Customers to BUY and USE LP-Gas



Nor-Tex "PONIES" (strategically placed for best distribution) can substantially boost year 'round sales and quotas. Operate them yourself or arrange with highway service stations to dispense LP-Gas for you. Nor-Tex portable "PONIES" can be easily placed on farms, ranches, in truck and bus terminals and "on-the-job" for contractors and utility companies. Nor-Tex "PONIES" meet all requirements — U-69 — W250 Codes. Sizes: 500, 700, 1000, 2000, 3000 and 4000 WG. Available with your choice of pumps, meters and accessories.

TEXAS TANK CO.

DENTON, TEXAS

CENTRAL 5416

ALLTROL® CENTER make GAS RANGE



ONLY ALLTROL® BURNERS GIVE THRIFTY MEASURED HEAT



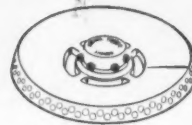
Instant full flame...
brings foods to cook-
ing temperature in
shortest time.



"Click" ... convenient
Low Frying heat...
provides perfect wide-
spread low heat for
"most used" frying
operations.



"Click" ... efficient
Center Simmer... main-
tains boiling in any
covered utensil.



"Click" ... gentle
"Keep-Warm" heat...
keeps foods perfect
for serving without
further cooking.

SIMMER BURNERS SALES *SIZZLE*

Coast-to-coast the story's always the same —
These 6 Super-Selling Points
 move more gas ranges
 for more profit



Only gas ranges with Center Simmer Burners can give these 6 user-benefits. And when you demonstrate these advantages—you, too, will find your range sales shooting upward—fast!

The reason is simple: most people need to be *shown* that *modern* cooking means cooking with gas—on Center Simmer Burners. Demonstrate these 6 main advantages—to prove your gas range is indisputably best, on every count!

Write today for your free copy of
 "How to Sell More Gas Ranges."

6 benefits your customers buy

- **COOLEST COOKING**—The measured heat of Alltrol Center Simmer Burners keeps kitchens up to 9° cooler. Cooks the food—not the cook!
- **CLEANEST COOKING**—Clear blue flame can't blacken pans... and the "just right" heat eliminates messy boil-overs.
- **HANDY KEEP-WARM HEAT**—Tiny pre-set flames keep food and beverages perfect for serving without further cooking!
- **LOW FRYING HEAT**—Convenient "always the same" setting. Perfect for cooking fish, eggs and bacon. Eliminates guessing, peeking under the frying pan.
- **GREATER CONVENIENCE**—No "matching" of pans with burners—use any utensil on any burner! And you can set the right heat by sight or by sound.
- **THRIFTIER COOKING**—Save up to 39% on fuel costs alone! It's an important saving—for 80% of home cooking is done on the top burners.

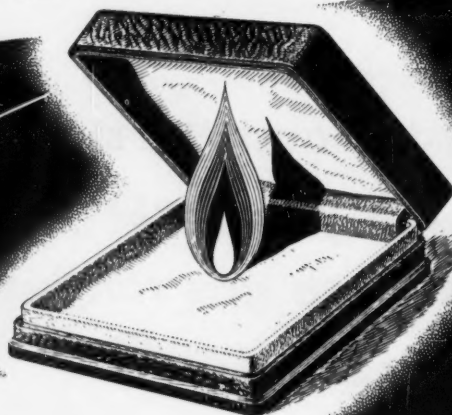
HARPER-WYMAN COMPANY

Dept. 16-B • 8562 Vincennes Avenue • Chicago 20, Illinois
 ORIGINATORS OF CENTER SIMMER BURNERS



31 years...

...of research and specialization in the gas appliance field...



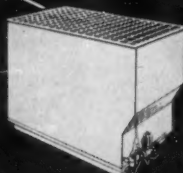
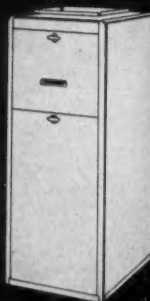
...of steady building toward the production of today's complete line of Temco gas heating units...



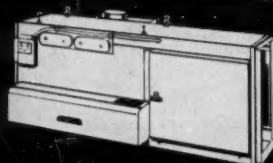
WALL FURNACES



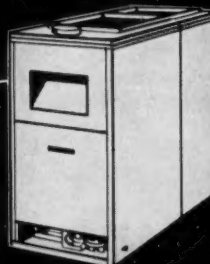
SPACE HEATERS



FLOOR FURNACES



CENTRAL HEATING AND AIR CONDITIONING



... of advertising in national magazines of top caliber ...



has created the nationwide recognition of TEMCO—by both consumers and dealers — as America's leading gas heating specialists.

TEMCO, inc.

NASHVILLE 9, TENNESSEE

*Gas Heating Specialists
for the Nation*

ROPER GAS RANGES

high styling!

peak performance!

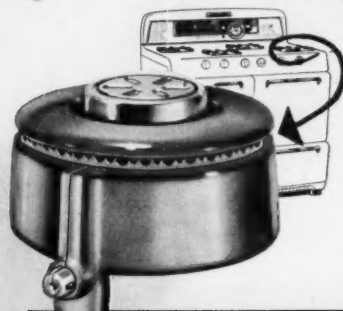
Fashioned

WITH Automatic TOP-BURNER COOKING

Great new sales aid! Super-speed "Tem-Trol" reaches pre-set heat faster by far... offers high heats for frying and low, low heats for "problem" foods. Maintains desired cooking temperature very accurately.

Tem-Trol

Controlled-Heat
Top Burner



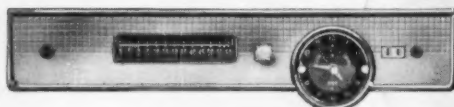
**WIDEST CHOICE OF
TEMPERATURES!**

...PLUS THESE OTHER "FULL-MEASURE" FEATURES



Amazing "Insta-Lite" Ignition

Lights top burners, oven and broiler instantly, automatically. Tiny bead of flame uses next to no fuel. Range surfaces stay cool.



"Insta-Set" Unified Control Panel

Groups four important controls... "Insta-Matic" Oven Guardian, Precision Timer, "Timed" Convenience Outlet and fluorescent lamp switch. Panel is rich Sun Tone.



Built-in "Glamor-Grill" with 4-Way Cover

Grand for hamburgers, ham and eggs, pancakes. Fats drain into large (2 cup) grease pitcher. Cover doubles as work tray, splash-back or cookie sheet. Easy to clean.



"Comfort-Level" Broiler with Sun Tone Serve Tray

Right up near the cooking top. Extra capacity. Broil and serve in the exclusive Roper broiling ensemble featuring smart, gleaming "Serv-Hot" grill and new Sun Tone Serve Tray.

SEND FOR FRANCHISE INFORMATION

I'm interested in Roper for 1956. Send me full details. Is the Roper franchise available in my community?

Company Name _____

Individual's Name _____

Street Address _____

City _____ State _____

BP 156

**ROPER "arRANGEable"
BUILT-IN GAS RANGES**

**ROPER "Dry-Aire"
AUTOMATIC GAS CLOTHES DRYERS**

for Fame ...

FAMED FOR FASHION



ROPER

"America's Finest Gas Range"



VISIT ROPER SPACE 529
American Furniture Mart, Chicago
See the "MAGIC SPOON" Demonstration

GEO. D. ROPER CORPORATION • ROCKFORD, ILLINOIS

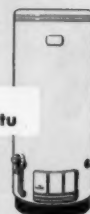
beyond comparison — *inside and out* ...the finest regulator ever made!



the new
Weatherco
LP-Gas
regulator



Automatic Range
50,000 to 70,000 Btu



Water Heater
25,000 to 35,000 Btu



Home Heating Unit
12,000 to 60,000 Btu

capacity—even as a single stage regulator the new Weatherco serves all 3 major domestic appliance requirements with plenty of capacity to spare—far more than any other regulator of comparable size and price.

no freeze-ups—more than 3 years of extensive use in the field has proved the ability of the Weatherco regulator to withstand the most adverse demands of weather conditions.

beauty—its sleek, advanced styling and beautiful gold finish will improve the appearance of your LP-Gas systems.

the Weatherco diaphragm . . .



this **molded** diaphragm eliminates the need of screw or bolt holes (most common cause of diaphragm tearing) and because the diaphragm is squeezed firmly but gently at the **outer bead**, it provides **greater working area** than any other. Areas where flexibility is required are properly thinned and contoured to permit **smooth working action**—other areas are thickened to provide **perfect sealing** and many, many years of trouble-free service.

Our newest catalog of Weatherco LP-Gas Equipment will be off the press soon. Order your copy **NOW**.
The Weatherhead Company, 300 E. 131 Street,
Cleveland 8, Ohio. Warehouses in Atlanta, Georgia,
and Memphis, Tennessee. In Canada, The Weatherhead
Company of Canada, Ltd., St. Thomas, Ontario.



WEATHERHEAD

... is showing the way

BUTANE-PROPANE News

**BPN**

Letters

Bottle filling at trailer parks

New York

Gentlemen:

We are interested in purchasing, storing and dispensing gas for 20 lb bottles, primarily used by the tenants in our trailer park.

Could you approximate the cost of such an installation or could you refer us to someone familiar with the cost and installation of the type of filling station that would fill the qualifications of servicing 20-lb bottle gas units?

E.G.

Naturally, the number of cylinders you expect to fill per day or week will have considerable bearing on the size of the storage and bottle filling equipment you install. If the number of bottles to be filled per day is relatively small, a 300-, 500- or 1000- gal. storage tank, small platform scale, and a hand pump may be adequate.

However, if the quantities are large, then a large storage tank, several scales, automatic filling controls, and power-operated pumps may be required.

The small plant can probably be furnished by a local L. P. gas dealer and properly installed by him. A larger plant should be engineered and its installation made or at least supervised by a competent engineering firm experienced in engineering and in installing L. P. gas plants.—Ed.



Bleeding-off difficulties

Nebraska

We have a customer who fills tractors from a 1000 gal. bulk tank, but he has gotten to thinking that by the bleeding-off process of filling he is wasting too much gas and it is too slow.

Therefore, he has in mind that the gravity flow deal should work if he would elevate his tank up 6 ft in the air and by using a vapor return between the two tanks.

Now I do not believe that he would

have too much success with this deal, but seem to be unable to prove it to him that is not worth the extra expense he goes to in raising the tank. Would you be able to advise whether the gravity flow deal works.

F.W.M.

Your customer could fill his tractors from the 1000-gal. bulk tank elevated to a position well above the level of the fuel tank on the tractor. He might experience some difficulty in getting flow started if the tank is top connected; and secondly, due to the resistance of the check valves in the filler valves on the tractor tank.

We believe that it would be more economical for him and would provide him with faster transfer if he purchased a small hand pump. Such pumps are relatively inexpensive and provide sure, safe transfer of fuel in a minimum of time without waste.—Ed.



Sizing the line

Iowa

Could you please tell me what size pipe would be necessary to maintain a pressure of 5 lb on furnace using 20 gal. per hour. The storage tank (30,000 lb) is located 750 ft away from the furnace.

I would also have to know what size regulator to use. We planned on using 20 lb at the storage tank, and 5 lb at the furnace.

K.G.

There is a table on page 317 of the "Handbook Butane-Propane Gases" entitled "Pipe Sizing for High Pressure L. P. Gas Lines" which should be helpful.

In using it on your problem, the following procedure may be followed:

Twenty gallons of propane per hour represents approximately 1,830,000 Btu per hour. Referring to Table 4 it is noted that all of the flow rates are based on 100 ft of pipe. Table 5, just below, includes factors to correct the flow for lengths of pipe other than 100 ft. Since the distance from the tank to the furnace is 750 ft and the

nearest figure in the chart is 900 ft the factor 3.0 is selected.

$1,830,000 \times 3.0 = 5,490,000$ Btu, which is the flow that would be required to produce an equal pressure drop in 100 ft of the same size pipe. Since the secondary regulator needs a reasonable inlet pressure for good regulation, select a pipe size that will give only 1- or 2-lb drop. Referring to the column under 20-lb initial pressure and 2-lb pressure drop, it is found that 1-in. standard pipe has a flow capacity of 6,970,000 Btu per hour which meets the flow requirements unless there is an excessive number of elbows and fittings in the line. The $\frac{3}{4}$ -in. line has a capacity far below that required even with a 3-lb line drop.

It is suggested you check with your favorite regulator supplier for suitable regulators. The high pressure regulators may be manifolded together if one is not adequate. In fact, it is recommended that one more than is required to serve the load be used in case one should freeze up in cold weather. The same may be done for the secondary regulators.—Ed.



Explosion hazards from accumulated dust

Colorado

A new building is being constructed here in Colorado to house our local Potato Growers Association operations.

Potatoes and onions will be sorted, cleaned and stored within. An engineer has instructed the manager of this association not to install L. P. gas suspended unit heaters because dust would collect on the burners of the heaters, causing explosions.

We know much dust comes from sorting the onions and potatoes, but would be interested to know if you feel this engineers statement is well founded.

G.T.C.

It is well known that dust from grain, coal, and many other products presents an extreme explosion hazard. We cannot say specifically about potatoes and onions, but suspect that dust from them is serious, too.

However, in such cases we would expect

FISHER®

OFFERS

**THE BEST
AUTOMATIC REGULATOR
and
CYLINDER VALVE
COMBINATION
YOU CAN BUY**

TYPE 965 A

Operates multiple cylinder systems with full automatic change-over without interruption of service or attention from user.
For loads up to 214,000 BTU/HR.

TYPE B100

Fisher Type B100 Cylinder Valve with integral safety relief valve — available in all standard variations of construction.

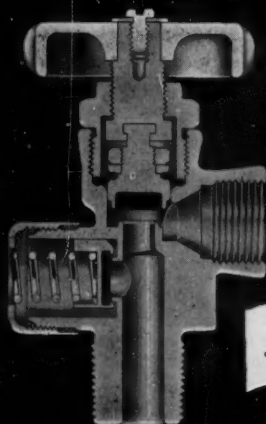
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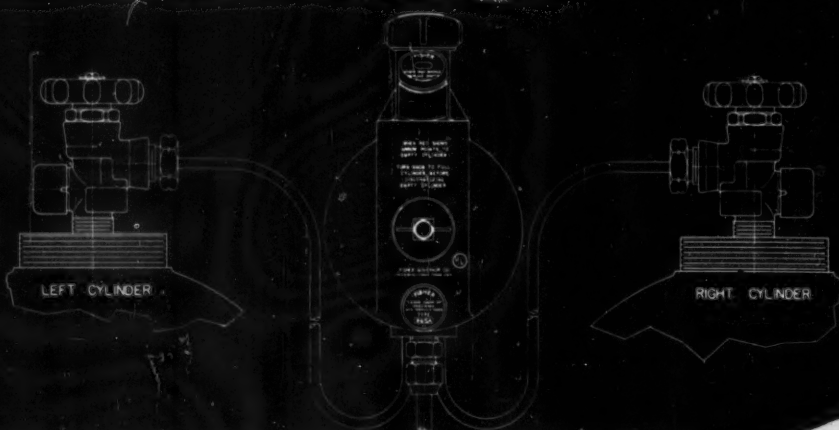
**LEADS THE INDUSTRY IN RESEARCH
FOR BETTER GAS PRESSURE CONTROL**



**FISHER
TYPE 965A**



**FISHER
TYPE B100**



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Since 1880

Letters • continued

that all the electric motors, electric switches, etc., present the same hazard and are dust-tight or explosion-proof so that they will not ignite the dust. If the engineer does not deem those items in the same light, we do not see why the open flame unit heaters present any more of a hazard.—Ed.



Propane vs diesel oil for standby

Alberta

We recently had a request to supply an auxiliary standby to a 200-bed hospital, which is supplied with natural gas as a regular fuel. Since then the hospital Board requested their architect to give them an opinion on the merits of propane as compared to No. 2 diesel oil.

Apparently the oil was preferred by him, but on checking his comparison we know that he was away out of line -- especially in cost of operation, which, incidentally, would not be too important in this case due to the fact that this set up would very seldom be used, and then only for a short period. Taking this fact into consideration, it would be in our favor due to the deterioration of oil over a period of time.

The amount of gas required is 9 million Btu. We have made several such installations in the past for smaller set-ups where we did not use a vaporizer. We used a throw-over valve and balanced pressures, and used the same burner for both propane and natural gas.

Since this is a larger installation, would you kindly give us your opinion, and any information which you may have on comparison of these two fuels. We enclose the architect's comparison, which you will note is definitely in favor of oil.

D.H.P.

The load of 9 million Btu, or about 100 gal. per hour, is too large to handle without the use of a vaporizer.

The steam vaporizer is a satisfactory unit for converting the L. P. gas liquid into the vapor phase. However, the item of cost set aside by the engineer in his report seems excessive. Good steam- or direct-fired vaporizers, complete with safety controls, all housed in steel cabinets so that no buildings are needed, can be purchased and installed for much less than \$8000. We estimate that half the above figure would be adequate.

The regulators and piping can be so arranged that the boiler can be operated

from vapors in the top of the storage tank for the few minutes steam is turned on the vaporizer or the direct-fired unit is placed in operation; or, steam can be kept on the vaporizer or the pilot lights and burners left on the direct units, so that they are operating when needed.

We see no reason for the surge tank unless the propane is diluted with air before it goes to the boiler. We believe that undiluted vapors will serve very well on the boiler with proper pressure setting.

Another point of cost difference which we do not understand is for the 125 KVA generator. Unless the unit is needed for such items as the boiler feed-water pump or other utility service, it would not be needed for the all gas-fired boiler. In any event, why the extra cost? If it is because the gas engine is more expensive, then use the diesel or sell the gas engine unit on its own merit. It is needed for other service rather than oil versus gas.—Ed.



Moisture in tank

Montana

We have a 1000-gal. propane tank. Our jobber fills it, then we fill bottles from it for resale. We usually remove all liquid and the vapor, to 10- or 15-lb pressure, then have tank refilled.

Last winter we got it filled in December and from that day on until spring we had freeze-ups continually. We claim the jobber put moisture in with his propane. Can see no other way it could get in, as the tank has not been vented or opened to admit air for four years. The jobber claims moisture will "collect" on the walls in the tank but he doesn't explain where it comes from.

We heat one room off the tank and the regulator we use froze up as much as five times in one night. The bad part, however, though, was that several customers returned bottles and were very unhappy.

How could moisture get in all of a sudden like that without coming in the propane?

C.G.

Your letter indicates that the tank has been on your property and in the service described for about four years, and suddenly after a load of fuel was placed in the storage your trouble started.

We feel that although the jobber may be entirely innocent of the water getting in the fuel, it entered your tank with the load of fuel placed in it during December. The reason we say that the jobber may be innocent of the water entering the fuel is that he received wet fuel from his supplier. Again it is possible that the water entered the fuel around his plant or truck

through water or snow entering an uncapped hose or connection and then being forced into the transport. Has the jobber had complaints from other customers?

After a tank has been in service as long as the one you have—without "freeze-up" trouble—the only way water can get into it is with the fuel, unless it has been completely blown down and the valves opened so that moisture-laden air can enter.—Ed.



Cooling a Freezer

Wyoming

We have a customer who has been informed that a walk-in freezer can be made and L. P. gas be used to cool it. Can you give us any information about where we could obtain the equipment?

Our customer only wants to make a small one, the size about an 8 ft by 8 ft.

A.L.

Servel Inc., Evansville, Ind., manufactures the gas-fired, absorption type refrigerating units. We believe they have a size wherein one or possibly several of their units will handle the refrigerated room which your customer contemplates building.

Servel is the only American company building the absorption type unit.

There are some companies which manufacture gas engine-driven refrigerating plants which may be adaptable to your customer's room.—Ed.



Tubing Fasteners

Alaska

What in your opinion is the best type of fastener for installing copper tubing, and what is the name and address of nearest supplier?

P.B.M.

We are not in a position to state what is the best pipe of fastener for copper tubing. There may be some types with which we are not familiar.

One type for fastening to wood which is considered good is the Hammer Head Clip, manufactured by Gas Kit Co., Glastonbury, Conn. The small clips used to support electric conduit are also satisfactory and they can be held by a nail or screw.

We assume you are referring to fasteners to hold the tubing in place along the runs installed. If you are referring to connectors, elbows, etc., we suggest the flare type of fitting. Many companies manufacture them. Check the ads in our magazine and catalog.—Ed.



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beyond the mains



MORE GOVERNMENT ATTENTION TO L. P. GAS VS. ELECTRICITY.

Agriculture Information Bulletin No. 141, a non-technical follow-up on Technical Bulletin 1073 (the Beltsville tests), has recently been published by USDA, and by now has presumably had widespread distribution among the REA interests, and through the offices of the County Agents. The full title is "Cost of Electricity and Liquefied Petroleum Gas for Cooking, Refrigerating and Water Heating"; its announced purpose is "to provide facts for extension and home service leaders and others who work with customers."

While it is based on the findings reported in Technical Bulletin 1073, the validity of which has been seriously questioned, it does emphasize the fact that the costs reported therein were based on rates prevailing at Beltsville, and that costs of actual operation anywhere else must be based on rates for each type of fuel that apply in that particular community. It also lists other important problems that should be considered in deciding between electricity and L. P. gas, including installation problems and costs (additional wiring, circuit breakers or fuses and additional circuits for electricity, and storage facilities for L. P. gas); cost and choice of appliances; dependability and convenience of service; and anticipation of installation of additional appliances. This is the best break they have given us in some time.

While the heavy infusion of electrical propaganda that characterized Technical Bulletin 1073 has been noticeably toned down in the new publication, it still leans to the kilowatt side. The government is not selling L. P. gas -- our industry must still stand on its own two feet and fight the competition on the local scene. We must recognize that actual bills for service rendered are the answer to comparative costs. We can still boil a quart of water quicker on a gas burner, and we can still demonstrate that broiling a steak in a gas broiler is cleaner than what happens when the unconsumed vaporized grease pours out of the open broiler door of the electric range. Bulletin No. 141 does not help us to sell gas appliances, but it does give us a chance to do the selling with a little less work.



HAVE YOU WRITTEN TO YOUR SENATOR LATELY? The creeping paralysis of federal control of natural gas production has already resulted in the reduction of drilling for new supplies -- 12% in 1955. This can not go on for very long without affecting the supply of L. P. gas, because nearly 70% of our product is derived from natural gas. The Fulbright bill, now awaiting action in the senate, is aimed to relieve the producers of the utility-type control now in effect. Your senator will appreciate knowing how you feel on the matter. The House of Representatives has already passed the Harris Bill, which is a companion measure on the same subject. While you have your typewriter warmed up, why not dash off a note to your congressman expressing your approval of the action of congress, and thanking him if he voted right? He will appreciate a few kind words -- congressmen receive so few expressions of thanks. The chances are that a few letters of approval will cause him to remember our industry with gratitude. You would not overlook that courtesy if one of your local associates performed an important service. Why hold out on your associate in Washington?

PICTURE OF AN INDUSTRY GETTING READY TO DO A BETTER JOB.
We doff our ten gallon hat and stand in silent admiration of the way the various state and district associations and some of the individual companies are tackling the problem of up-grading the industry personnel. Service schools, safety schools, management schools, carburetion schools, training sessions for the local firemen -- it's all a part of the general program of getting ready to better discharge our obligations to our customers and our communities. All this training effort is work. It runs into countless hours of overtime, mostly unpaid, by a great many people who plan, prepare and conduct the programs. But it is paying off. We can not assign values to better service for customers, or reduced sales resistance, or greater knowledge of good management practices, or improvement of winter-summer load ratios, although there can be no doubt that these factors create a healthier business climate. But we can trace definite financial gains to the various programs for promotion of safety. Insurance rates are down. The saving in premiums can be determined for your business -- but the money factor is only a minor part of the saving resulting from avoidance of accidents. The human savings are far more important. Yes, we are on our way, but there is still a long way to go.

Karl Abell



A round-up of outstanding new products

In the course of a year, hundreds of new items of equipment and other hundreds of improvements on established products are born. Announcements of these items flow in a steady stream across the editors' desks, and from these are selected the ones that appear to be the most soundly conceived and useful to the industry served. Each month BUTANE-PROPANE News publishes a special column devoted to the presentation of these ideas.

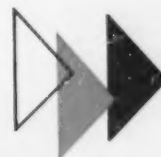
Among those selected, a few stand out as being more significant than the rest. It is around these standouts that this year-end feature is built.

"What's New?" What's exciting? What is likely

to mean most to the LPG dealer in the year ahead? Which items of fueling equipment seem to offer the greatest savings in time and the greatest convenience (and, consequently, the greatest reduction in expenses)? Which gas appliances have that extra something that will strike a spark in the imagination of the homemaker?

The new products presented in this feature are those that have appealed to the editors of BUTANE-PROPANE News as having that "extra something." Some will strike a familiar chord; these were previously announced in 1955, but because of their special interest they are being presented again. Others are being unveiled for the first time.

READ ABOUT IT ON THE NEXT PAGE



Domestic Appliances and Controls

what's new

Exciting and truly significant improvements are being made in domestic gas-fired appliances. New controls bring glamor to top-of-the-range cooking. New built-in range units keep pace with the trend toward modernity and livability in today's kitchen. . . . The controls themselves are being designed with an eye to beauty. . . . Rotisseries are bringing the patio chef indoors to enjoy the dependability and speed of gas. . . . Water heaters by the score are incorporating new protective coatings that promise to extend the appliance's life. And in this field, too, beauty's the thing. They're bringing them up out of the basement and making showpieces of them. . . . There's a new table top model and a copper-tone beauty. . . . Yet underneath it all, the basic concepts are still quality and performance. . . .

1. Oven thermometer—With the "Gradu-Temp," the appliance man can check and adjust an oven in record time. There is no stooping and peering into hot ovens. Since tests are made with the oven door closed, the serviceman can put away his flashlight. He won't burn his hands nor sear his face trying to see a thermometer in the oven.

The temperature range is 100° to 600° F on a scale 4 in. long. An armored, flexible thermocouple wire is the sensitive element. It is 5 ft long.

The meter is compensated for cold junction and copper error. It has a current sensitivity of 250 microamperes and can be used for sensitive current measurements. There are two millivolt ranges, 0 to 50 and 0 to 500, for checking pilot safeties. A pair of clip leads is included for connections.

Assembly Products Co. Inc.

2. Valve & pilot control—A valve and pilot control "package" has been developed which increases the flexibility of control systems available to manufacturers, dealers and users of gas room and wall heaters while cutting inventory and installation problems.

Designated the V5153 Adatrol and built by Minneapolis-Honeywell, the new control includes a basic valve section on which Honeywell's fool-proof gas cock Pilotstat is factory mounted.

Models may be purchased with thermostats factory installed or the unit can be supplied with a thermostat "kit," which the manufacturer, dealer or homeowner can use to install the thermostat.

Two other add-on features—also available for either original equipment or field installation—are a minimum rate high-low bypass assembly and a spring-loaded pilot filter.

The package system enables equipment manufacturers to supply basic valves and pilot controls in a single installed unit for each appliance manufactured.

Range of the thermostat is 55 to 95°. The by pass mounts below the pilotstat valve and 100% safety shut-off or safe-lighting are not affected by use of the bypass.

The new control is available in ½- and ¾-in. sizes. Pilot flow adjustment screw is standard.

Minneapolis-Honeywell Regulator Co.

3. 2-system control—General Controls new thermostat for installation where complete automatic summer-winter temperature control is desired will automatically switch a 2-way system from heating to cool-water heater thermostats, has been streamlined to add styling to any water heater.

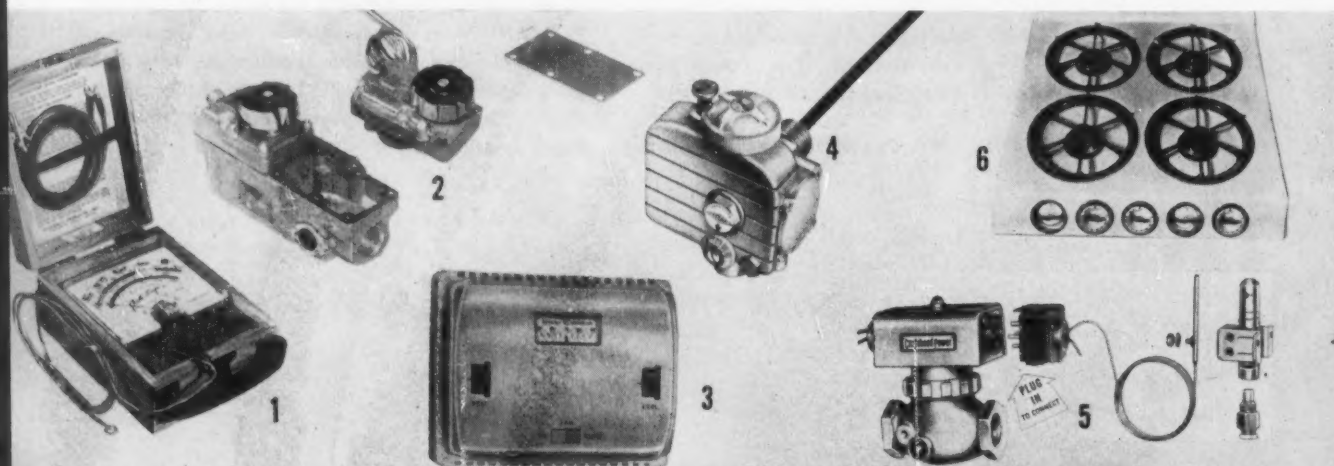
The new thermostat's "thin silhouette" case of satin finished stainless steel provides a modern exterior for the automatic control.

Included in the thermostat are mercury switch contacts, hermetically sealed against dust, grit, lint and moisture; large white numerals on black roll-type, positioned to permit easy fingertip control without wall smear.

General Controls Co.

4. Thermostat—The Titan Tank-master Model C-100, a redesigned version of Models C-40 and C-50 water heater thermostats, has been streamlined to add styling to any water heater.

A high strength alloy of aluminum is now used for the body with a brass boiler shank. The body is produced by a shell-molding process which



combines the advantages of die and sand casting and permanent molding.

The main valve is of the "soft" type, using a Buna H-84 material that will not dry out, swell, crack, or craze because of severe gases. The valve is opened and closed by the Titan toggle mechanism, which eliminates throttling of the main valve—the main burner is either full on or completely off.

Magnetic shutoff provides 100% shutoff and is easily removed in the field without distributing any other parts. The thermostat incorporates true 100% safe lighting; it is impossible to light the pilot without turning handwheel to the "pilot" position.

Larger tolerances in recalibrating are possible since the temperature dial turns through an arc of 345°. Critical adjustments are eliminated. *Titan Valve & Manufacturing Co.*

5. Gas valve combination—A new gas valve combination for use in conjunction with a plug-in type automatic gas pilot comes unassembled, making it possible to provide combinations to fill practically any gas-fired requirement from a small inventory of valves and pilot sub-assemblies.

White-Rodgers' new plug-in feature also permits a quicker, more convenient installation.

The new pilots combine a rugged snap-action switch and a powerful mercury-actuated thermal element.

Valves are available in ½-, ¾-, and 1-in. sizes with capacities of 340, 450, and 775 cu ft per hr. Pressure rating is ½ psi. They may be used with all gases: for 25-volt or 110 volt, 60-cycle ac. Special voltages and frequencies are also available.

White-Rodgers Electric Co.

6. Top burner control—Top burner temperature control is available on Caloric gas ranges with the company's Thermo Set control.

Thermo-Set uses a newly developed burner head with a control unit that has been proved in tests to be extremely sensitive in response and fast in heat recovery.

The burner has a full rated input of 12,000 Btu/hr. The flame retainer shield built into the burner head does not affect the speed of cooking.

A specially designed valve plug prevents overheating by limiting the input to one-half rate at settings of less than 350° F. At settings in excess of 350°, the full input of 12,000 Btu is utilized.

Caloric Appliance Corp.

7. Built-in oven—Quick, easy installation and eye appeal are stressed in Hardwick Stove Co.'s new built-in L. P. gas oven unit. All gas and electric connections are made in front. Mounting screws are located in front and clamp the oven tight against the wall so that no hot air can escape to discolor wall.

Hardwick's cold-air pump helps insulate the oven walls and cools vented air. Louvers on oven vent direct air up, away from the face. Clock control of the oven is optional. *Hardwick Stove Co.*

8. Built-in range—A new built-in gas range and top units has been announced by Tappan Stove Co. The oven is designed to fit into a 24-in. cabinet and the 4-burner top unit will fit into a 24-in. space.

The range features fully automatic cooking with easy-to-use controls at eye level.

The chrome-lined oven, which reflects the heat for best baking re-

sults, features the lift off door, making the oven-cleaning job a simple one. The door lifts out of the way so that even the back part of the oven is accessible. Also featured is Tappan's counter-balanced Visualite oven door—the original "oven door with a window."

Underneath the oven is a clean-quick smokeless broiler. Both the broiler pan and insert are chrome-plated to make them stain resistant.

The unit is easy to install, requiring only a rough opening of 22 in. by 38 in. Only one cut-out is required and the unit can be installed in a matter of minutes.

The 24-in. burner top has four burners, one Mighty-Mite, two standard size, and one giant. Valve handles are located in a separate opening in the front. They are lock-type to insure the safety of youngsters. *Tappan Stove Co.*

9. Triple-roisserie range—A triple rotisserie, offering a changeable skewer arrangement which can be altered to fit any occasion, is available on all O'Keefe & Merritt deluxe high broiler console and built in ranges.

The three-skewer arrangement offers unusual flexibility for broiling operations. Each skewer may be used separately, or they may all operate simultaneously.

The constant-speed motor and skewer unit are easily removed for conventional broiling and for easy cleaning.

O'Keefe & Merritt Co.

10. Water heater—The new Copertone Mission Doubleglas gas water heater has among its many features two walls of glass which give twice the protection against rust;



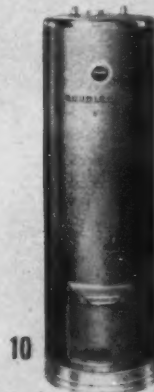
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Domestic Appliances and Controls

complete enclosure of the tank and controls; larger external flue to provide greater heating area; fiberglass insulation to reduce heat loss, and electro-magnetic safety control.

One of the outstanding characteristics of the new water heater is its Coppertone finish. This completely encases the new Doubleglas heater with the exception of a capping of chrome-plated steel to add a contrasting note.

Mission Appliance Corp.

11. Glass-lined water heater—A new, deluxe, glass-lined automatic gas water heater, the Floridian, is being marketed by Robinson Utilities Corp. One feature of interest is a sealing material that is flowed around all welded seams inside the tank for added protection.

Other selling points are twin magnesium anodes, special brass fittings, Robertshaw thermostat, and a cast-iron, precision-machined slotted burner for greater flame spread in heating area.

The heater is heavily insulated with thick glass wool and is available in 30- and 40-gal. sizes.

Robinson Utilities Corp.

12. Automatic storage water heater—A new series of automatic gas storage water heaters from Lawson Manufacturing Co. feature tanks lined with stone to assure pure, rust-free water.

The Rocket automatic, in 30-, 40-, and 50-gal. sizes, is equipped with Robertshaw-Grayson Unitrol 100% control. External flue design offers fast heating.

The new series, which comes with a 10-year tank guarantee, is finished in two-tone gray and white enamel. It has AGA approval for use with all gases.

Lawson Manufacturing Co.

13. Aluminum lined water heater—Rustproof, chip-proof, non-flaking aluminum has been used in Clayton & Lambert's new Alumilux water heater. It is claimed that red, rusty water will be eliminated and anodic protection will not be needed to guard against tank corrosion. Because of aluminum's ability to absorb and transfer heat, water is heated faster with less fuel cost.

Because of heavy insulation, the manufacturer states, the tank also stores hot water longer. Storing water at 180°, the new heater provides not only hotter bacteria-killing water for appliances, but also greater quantities of conventional temperature water from the same storage space. An accessory-mixing valve allows tap water to be adjusted to any temperature desired.

Clayton & Lambert Manufacturing Co.

14. Glass-lined water heater—A new series of glass-lined automatic gas water heaters, the Glass Cascade

line, is available from Cleveland Heater Co. in three sizes: 30-, 40-, and 50-gal. capacities.

The new heaters have a center flue with spiral baffle extending from top to bottom for maximum heat transfer to water.

In addition to the glass lining, other features include electrically welded special steel tank; combination thermostat and pilot control with automatic safety shutoff; heavy Fiberglas insulation; draft diverter; Patrol pilot filter; Elno anodic rod for extra protection and to insure clear water. All three sizes are available equipped to burn LPG.

Cleveland Heater Co.

15. Table top water heater—Waldorf Heater's new glass-lined table top water heater has been designed for flush-to-wall installation. It is available for 24,000-Btu input in vented models or 5000-Btu input in the unvented model.

Designed especially for L. P. gas, the heater is made in 30-gal. size only. It is also available in galvanized-tank models.

Waldorf Heater Co.

16. Non-chip water heater—A new water heater for the LPG industry from Harrison Steel Cabinet Co. features an unbreakable, non-chip, lifetime lining for steel tanks called Flexi-Glass.

The Thermo-Flo water heater is completely automatic, with selective temperature dial. Also featured in the heater is its 1-in. fiberglass insulation, an easily removable link baffle, and a circle-type clog-proof burner.

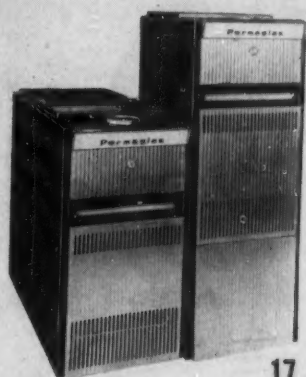
Harrison Steel Cabinet Co.



what's new

Domestic Heating

Househeating equipment continues to assume new shapes, forms, sizes, and operating characteristics until now it is possible to obtain a model to suit almost any location and heating requirement. Better air circulation, improved heat exchangers, quieter operation, and floor-level heat distribution are some of the many outstanding advantages now being incorporated in gas-fired equipment.



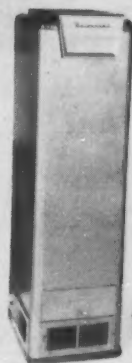
17. Warm air furnaces—A. O. Smith Corp.'s warm air furnace and summer air conditioning lines will be expanded by as many as 60 new models in 1956.

Depending on model, type, and size, which may be as small as 14 in. wide and 24 in. deep, the new units can fit almost anywhere in a home.

Color will be used throughout the line. There are no handles on the exterior of the furnaces, and a built-in draft diverter has enabled the designers to save an average of 8 in. in overall height of these units.

First units to reach the market will be the 22 gas-fired furnaces in the Lo-Boy, Hi-Boy, and Downflow models ranging from 70,000 Btu/hr to 150,000 Btu/hr, with companion 2-, 3-, and 5-ton cooling units, air-cooled and water-cooled condensers. Six additional gas-fired models from 175,000 to 200,000 Btu/hr will be available.

A. O. Smith also markets a line of horizontal furnaces ranging from 60,000 to 140,000 Btu/hr, with both belt- and direct-drive in the 60,000 and 80,000 sizes; belt drives actuate the remainder of the line.



The ceramic-coated heat exchanger has been redesigned as a multiple radiator heat exchanger in contrast to the former "doughnut" type.

A. O. Smith Corp.

18. Gas-fired room conditioners—A new line of gas-fired room conditioners just introduced incorporates a new principle in room heaters. A constant air circulating counter-flow principle has been applied to the heaters, assuring warm floors and even temperatures.

There are two separate burners, one for high-fire and one for low-fire. The fan operates automatically, depending upon the heat requirements of the room. As a result of the room thermostat calling for heat, when the low-fire burner is in operation, the fan operates at low speed, and at high speed when the high-fire burner is used. The fan is mounted directly in the top of the unit, taking incoming air from the ceiling and forcing it down and out through the three registers mounted at the bottom. The two side registers are adjustable.



Distinct features of the unit are the cool cabinet and its compactness. Cribben & Sexton Co.

19. Low-highboy type furnace—Two 90,000-Btu input furnace models of the low-highboy type have been introduced by Perfection Industries.

Featuring top-front flue outlet, the furnaces have been AGA-approved for closet installation with zero clearance on both sides and rear, and 6-in. clearance from front of draft diverter to combustible door.

Model GH89D has a single-speed, direct-drive blower, a single port, up-shot cast-iron burner, and an automatic gas valve with safety pilot.

Model GH89VT has Perfection's Regulaire blower, which tailors the amount of heat delivered to the amount of heat there is in the plenum chamber; a three-stage fire, and the single-port, up-shot-type burner.

Perfection Industries Inc.

20. Forced air heating line—Day & Night has added a new series to its forced air heating line, the Life-





Domestic Heating

width, 29-in. depth, and normal 58-in. height. These dimensions make the unit particularly adaptable to installation in a common water heater-furnace closet.

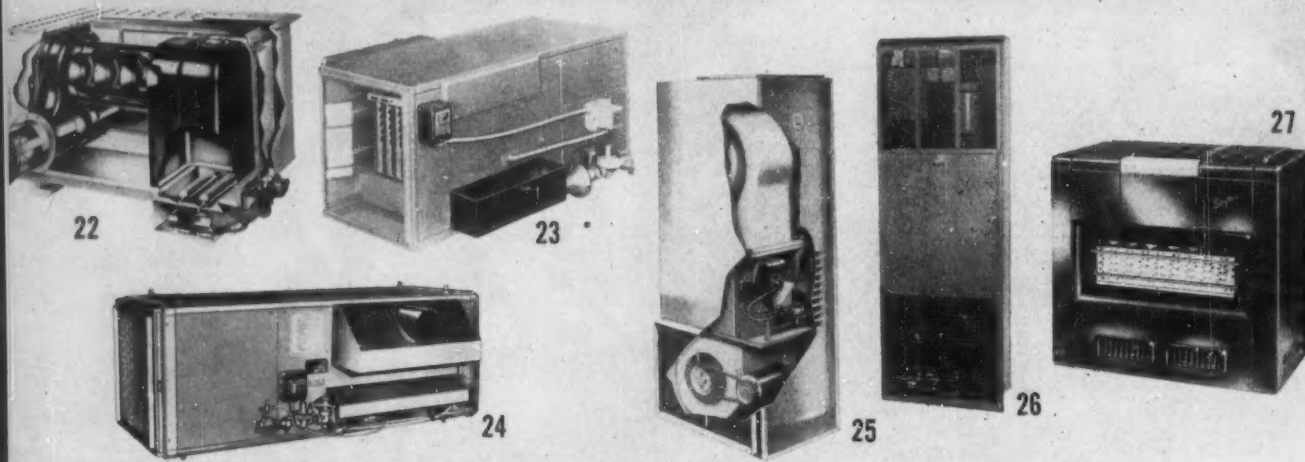
Sequoia Manufacturing Co.

22. Floor furnace — Among new features incorporated in the Samco gas-fired floor furnace is its heat exchanger, with built-in draft diverter to eliminate the necessity of addi-

furnaces and heat-air conditioning

The new enlarged Sy-lent heat exchanger in the upflow and counterflow models gives greater heat capacity and features a flexible elbow to combinations.

eliminate expansion and contraction noises. The diaphragm-type control valves do away with the on-and-off "clicking" of the fuel supply valve. In some models the Dy-Rekt drive blower provides quietness of operation and other models use the Utility



guard model. It has a new protective coating on the heating element that assures the owner against rust-out or burn-out. Its Dual-Safe controls include a 100% safety pilot and a high-limit control against excessive temperatures and an extra 100% watchguard control, which will shut off all gas to the unit in the event extraordinary conditions impair the functioning of the standard controls.

The Lifeguard series is available in three models: the Upflow (UFA-L) with Btu input ratings ranging from 75,000 to 200,000; the Downflow (DFA-L) rated at 75,000 to 100,000 Btu; and the Horizontal (HFA-L) for 85,000, 105,000, and 130,000.

Day & Night Div., Carrier Corp.

21. Narrow-width upright furnace—The Pacer line of narrow-width upright forced air gas furnaces produced by Sequoia Manufacturing Co. has been expanded to include a 112,000-Btu model. Initially the new furnace was offered in a 75,000-Btu size.

The new 112-P maintains original series configuration with a 20-in.

tional labor for installation of this portion of the unit after the furnace has been dropped into the opening in the floor. The heat exchanger is completely porcelanized inside and out and carries a 20-year warranty.

The inner liner is of heavy, double-coated galvanized steel, with internal shielding to provide proper insulation between cold air intake and warm air outlet. Its cast-iron burner has slotted ports to complete combustion and silent burner operation. Air adjustment to burner can be made from inside of room by moving air adjustment lever.

The draft diverter provides additional heat transfer and prevents back drafts or cross currents from disturbing either pilot or main burner flame.

All models are available with automatic safety pilot valves.

Samuel Stamping & Enameling Co.

23. Silent operation — Silent operation has been stressed in the new Weatheramic line of vertical, horizontal, and counterflow forced air

belt-driven blowers with improved resilient mounting to eliminate blower noise.

Utility Appliance Corp.

24. Horizontal furnace — Four new units make up a new line of gas-fired horizontal furnaces ranging in size from 80,000 Btu to 140,000 Btu input.

Provision for installing both the burner and the draft diverter hood on either the front or back of the unit provides diverse installation features. This same flexibility makes possible installation of the burner on the side and at the end of the unit that will be most convenient to air discharge and intake ducts and to the gas supply.

An adjustable flue collar, mounted on the draft diverter hood, is easily placed in either a horizontal or vertical position, permitting the flue vent pipe to be extended at any angle.

C. A. Olsen Manufacturing Co.

25. Highboy gas furnace — Outstanding feature of Herbster's new

85,000-Btu automatic gas-fired forced air highboy furnace is its cast iron Torcon heat exchanger, which carries a 25-year guarantee. The heat exchanger has 16 radiating surfaces, yet is made in one piece to eliminate contraction and expansion noises.

The highboy also features accessible filters that can be replaced without removing any panels from the furnace; an aircraft centrifugal-type blower assembly for forcing air through long ducts; new non-corro-

sional standards for wall heaters on vent temperature and discharge air temperature, designed to eliminate hot wall hazard.

Kilbury Manufacturing Co.

27. Console heater—Heading the line of Siegler home heaters is the new 85,000-Btu console, 885-UB Regent. This compact heater has been developed to handle tough heating jobs with a capacity of heating up to seven rooms.

safe at all times. Baffled construction directs heat out front of heater. The J-25 comes with five radiants, the J-35 with seven.

Jacobs Manufacturing Co. Inc.

29. Circulator heater—Chrome grills completely screen the radiant heating elements in a new unit by Jackes-Evans Manufacturing Co. With gas turned on, it is transformed into a radiant heater with the glow of the burning radiants clearly visible. When gas is turned off, only the chrome grills are visible.

Other features in the 20,000 to 60,000 Btu circulator line include a new special alloy steel combustion chamber, aluminized cabinet interior, and new type stainless steel radiants that are said to last indefinitely.

A choice of various preassembled control manifolds is available.

Jackes-Evans Manufacturing Co.

30. Unit heater—Six models ranging in size from 50,000 Btu input to 225,000 Btu are included in Temco's new line of gas unit heaters.

Featuring compact design—two of the models are only 23 in. high—the unit heaters are easily installed, suspended from two pipe hangers and with electrical, vent, and gas line connection easily completed. The unit heaters have a balanced fan with overlapping blade powered by a slow-speed, resilient-mounted motor.

Heat exchangers are finished in Temco's high-temperature porcelain enamel, which will neither rust nor burn out.

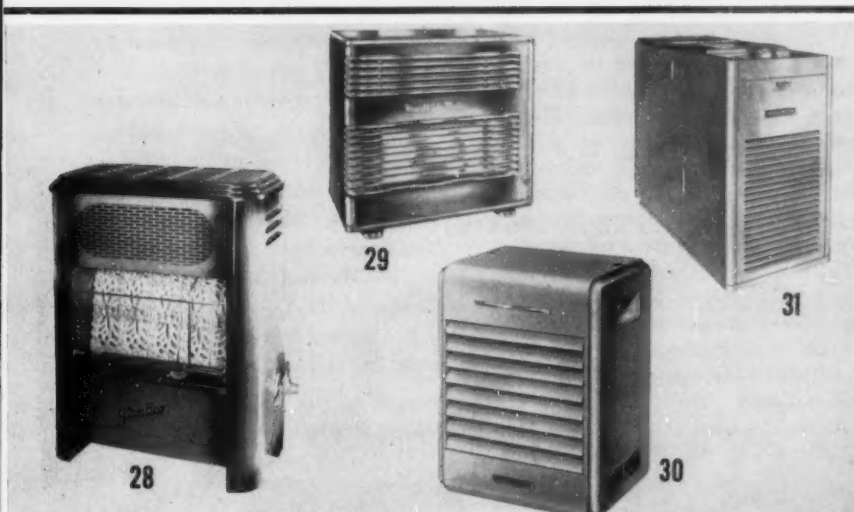
Temco Inc.

31. Furnace line—The new "Special" line of heating units, manufactured by The Williamson Co. has new color and design styling. They include Hi-Boy, Lo-Boy, counter-flow, and horizontal types. The new line has new styling in the design of the vestibule covering the burner and controls.

The vestibule is built-in on the Lo-Boy models, and is available as an optional feature on other models.

Color, too, has been changed on the new Williamson Special furnaces for 1956. The change reflects the new trend toward location of the heating unit in or near living areas in modern homes.

The Williamson Co.



sive cast iron raised, drilled port burners designed to permit more efficient combustion of gas with minimum waste.

Herbster Furnace Co.

26. Recessed heater—Floor level heat and modulated heat flow are features of the new Floor-Flo, a 50,000-Btu fan-type recessed heater.

Recent improvements in modulating gas controls make possible gentle, dependable heating of floors by regulation of the amount and temperature of warm air being circulated at low room levels.

Utilizing a two-speed fan and snap action modulating type thermostat with the minimum bypass rate at 40%, Floor-Flo in everyday use operates mostly on low, quiet fan speed (1050 rpm) and low fire down to 20,000 Btu. Temperature change sensing element is located at the base of the heater and inhibits the formation of floor chill. Full capacity of the unit is required for short periods only on extremely cold days.

Floor-Flo meets the new 1956 na-

The Regent takes advantage of Siegler's method of warm floor heating. Sixteen giant inner heat tubes, located inside the combustion chamber, are connected to a supercharger manifold. A blower pulls in room air and drives it down through the inner heat tubes. This air is super-heated as it travels right through the fire, then is poured out over the flames.

Siegler Corp.

28. Radiant heater—Recently approved by AGA, the Glowboy unvented safety radiant heaters, J-25 with 25,000-Btu capacity and J-35 with 35,000-Btu capacity, were especially designed for the L. P. gas industry. Modern in design, the heaters have copper-tan high-lighted color set off by smooth hearth sections of chromium.

Cast-iron main top adds strength. Aluminized steel baffles are rust-resistant. The burner is also of cast iron and has precision-drilled, raised ports. It provides maximum efficiency and is long lasting.

Cabinet construction keeps heater

Systems Tanks and Fittings

32. Relief valve manifold — Full protection through a single opening is provided by a new L. P. gas relief valve manifold for 30,000-gal. tanks.

Four complete valves are provided in this new Rego Series 7564, with any three affording a combined capacity of 27,750 cu ft of air per minute, or more than ample for a 30,000-gal. container.

Because of a patented shutoff system, one relief valve can be removed for test or replacement at any time without affecting the operational performance of the storage tank or the other three relief valves.

Its simple, compact design provides a high filling rate, and employs an efficient and positive safety relief device, which has been approved by the Bureau of Explosives for use on LPG cylinders of up to and including 500-lb water capacity. A rugged forged brass body lends greater strength and durability to its construction.

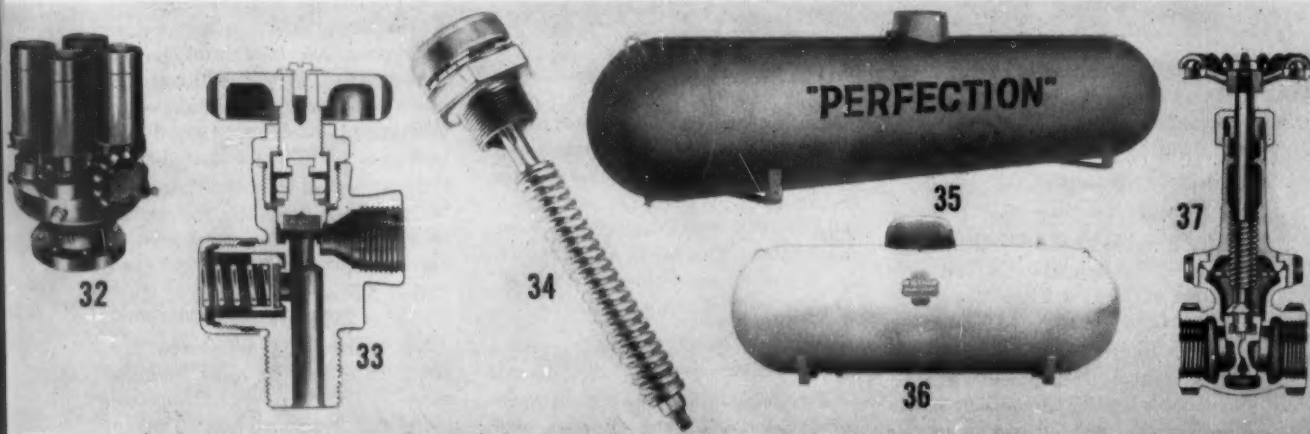
Return valves, safety relief valves and all couplings and adaptors required for the safe and efficient operation of L. P. gas systems are now included in this new addition to the Fisher line.

Fisher Governor Co.

interference with stem movement by dents in body caused by rough handling, according to the manufacturer.

The valve is UL-approved, and has capacity of 4370 cfm of air at 250 psi setting, and 5255 cfm at 312 psi setting, making the valve suitable for ASME tanks having areas in square feet of 214 and 268, respectively. (Tanks of 1150 gal. wc normally have a square foot area ranging between 200 and 210, depending on design.)

Selwyn-Pacific



The body of the big manifold is cast steel while the relief valves are steel with brass liners.

Bastian-Blessing Co.

33. Cylinder valve—Highlighting Fisher Governor's completely new line of L. P. gas cylinder and tank valves is its LPG cylinder valve, which features a perforated resilient diaphragm, retained by positive mechanical means and eliminating the need for sealing or luting compounds.

34. Internal spring type valve—In the Selwyn-Pacific No. 453 size 1¼-in. internal spring-type relief valve the stem guide is made integral with the brass body forging. This keeps the stem square with the valve seat and insures against settling out of line. The stem is steel for maximum strength.

The external portion of the valve body is threaded to take an adaptor for a 2-in. pipe connection. Smooth design of the valve and stem assembly eliminates the possibility of in-

35. Consumer system — Black, Sivalis & Bryson's new Perfection propane system is available in 250-, 500-, 750, and 1000-gal. capacities.

The one-piece dome features an integral stiffening ring around its lower periphery and is fitted with hinge and offset latch for quick opening action. The absence of any holes in the dome provides complete weather protection for controls.

Sturdy leg design is provided by one-piece channel supports that are press-formed, wrap-around type.

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There is more than 200-sq in. bearing surface, thereby lessening the stress on the foundation.

Recessed internal relief valve provides maximum safety because the valve is located outside the dome and there is no danger of obstruction when the valve opens. Working parts are inside the tank where they are protected from damage.

Bottom opening for liquid takeoff is located in the lower part of one head to provide maximum ground clearance when taking liquid from the tank. All welding on Perfection propane systems is complete double pass with integral backing strip and full penetration.

Heavy lifting lugs placed far out on the heads of the tank provide better balance and easy handling.

Black, Sivalls & Bryson Inc.

36. Domestic system — Frequent repainting is reportedly eliminated in McNamar Boiler & Tank's new domestic system because of its sand-blasted shell and head, which give the tank a smooth, durable maintenance-free finish.

color design. The systems come "fitted" to suit individual needs.

McNamar Boiler & Tank Co.

37. Gate valve — Ohio Injector Co.'s No. 8202 valve for safe, absolute seal and extra long life, has been especially engineered and fitted for more positive control of L. P. gas.

The cutaway illustration shows those parts of this new valve that provide a leakproof seal and contribute to increased service life. Mating the spherical seat on the bonnet with the angular seat on the valve body assures an absolute seal at the joint. The use of this type seal in the union design permits unrestricted dismantling of the valves without reducing the leakproof nature of the seal.

Packing consists of a special OIC synthetic material which reduces stem friction and assures a leakproof seal. A back-seating design between stem and bonnet permits repacking under pressure in the full open position.

The stems are machined from the new aluminum-silicon-bronze, which won't gall or seize, even in long serv-

control unit. A one-piece, deep-drawn, lock-down type hood covers the Rego fittings, which have been used throughout, and a gallonage-type recording gauge.

The system also features extra heavy, reinforced legs to assure easy installation and give maximum protection against tipping.

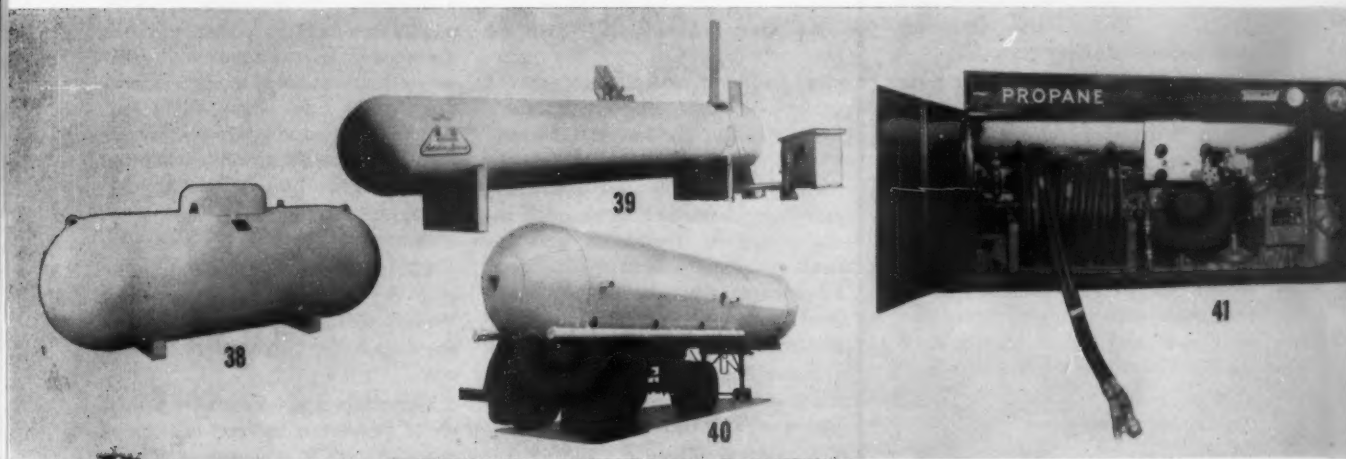
Fabrication has been in accordance with the ASME code for 250-lb working pressure and UL approved.

Anco Manufacturing & Supply Co.

39. Storage plant — Packaged L. P. gas and anhydrous ammonia storage plants with virtual push-button operation have been recently introduced by the J. B. Beaird Co.

Designed to fit each dealer's individual bulk storage requirements, these packaged plants are shipped complete with every pump, valve, fitting and accessory needed for installation and operation.

Operating speed and flexibility are assured by a specially designed control center at the compressor manifold where the operator may simultaneously unload a rail car, fill stor-



A new manufacturing development also provides complete dehydration of tank, assuring trouble-free, uninterrupted service.

Another innovation is the larger, stronger dome, which permits use of larger regulators where desirable, or two-stage regulation. Base of the legs has been widened to provide greater strength and to permit the dealer to set the tank more easily.

McNamar also gives the dealer his choice of color specifications and

ice. The wedge is tapered, double-disc type, made of copper-nickel alloy to resist wire drawing and galling.

This double-disc gate valve has been approved for LPG service by the Underwriter's Laboratories.

Ohio Injector Co.

38. Consumer system — In Anco Manufacturing & Supply Co.'s new Flint LPG system, the fittings have been mounted individually, in an island bar, replacing the multi-head

age tanks or delivery trucks, fill cylinders and recover vapor at each stage—all at operating speeds of from 60 to 140 gal. per minute. Controls are also furnished to reverse any step of filling or unloading.

Built to conform to all existing code requirements and regulations, the packaged storage plants are X-rayed to assure maximum safety. Compressor and cylinder filling pump and their manifolds, as well as truck and rail risers, are all preassembled and tested before they are shipped as sub-

Continued from page 35

assemblies. A full range of sizes from 2000- to 30,000-gal. capacities.

The J. B. Beaird Co. Inc.

40. Transport tanks—Propane and anhydrous ammonia transport tanks are being produced out of Car-alloy T-1 steel by Superior Tank & Construction Co. This new high tensile steel, recently approved by the ASME, allows Payloads far in excess of any units now in operation, according to the manufacturer. Payloads in excess of 10,000 gal. are not uncommon in some states with this new steel.

Superior Tank is still specializing in the custom design and engineering of maximum capacity units transporting pressure products to fit the individual operator's specific needs. *Superior Tank & Construction Co.*

41. Transport line—Outstanding among features currently offered in Trinity Steel Co.'s line of transports is the use of a duel hose wherein both liquid and vapor hoses are molded together for simplicity in handling. The hose is for use on a double electric Hannay hose reel, which was produced in collaboration with Hewitt-Robbins Rubber Co.

Another innovation in the Trinity line of bulk trucks is the availability of complete remote control operation, involving clutch, throttle, power take-off actuated by vacuum cylinders, and also completed remote control Okadee valve operation. This includes Trinity's pump-on manifold, which allows the operator to load his own truck without a reversible power take-off, and at the rate of approximately 57 gal. per minute with only a 38-gal. pump. *Trinity Steel Co. Inc.*

42. Metal coating—"Alumana-tion" (F-46-R) is a coating developed for application to metallic surfaces, including tanks used in the L. P. gas industry. It gives a quick-drying aluminum finish that will not chip, crack or peel, even when subjected to repeated handling, as with bottles, the manufacturer states.

Alumana-tion 301 is a similar product but used primarily for coating, caulking, waterproofing, and rust-proofing metal and masonry surfaces. *Republic Powdered Metals Inc.*

Agricultural Equipment

what's new

43. Infra-radiant brooder—Rhinehart Manufacturing Co. claims economical operation for its new infra-radiant gas brooder. A cost of 1.2 cents per chick has been obtained at outside temperatures of 42° during the brooding period. The area under the brooder is 100% usable with no obstructions.

The infra-radiant brooder has a high percentage of infra-red rays, as evidenced by the red glow of the burner when in use. These rays have a high heat penetration and aid materially in cutting fuel cost.

Rhinehart Manufacturing Co.

44. Oversized radiators—Siebring Manufacturing Co. now has oversized radiators and a weatherproof control which have added to the efficiency of this company's stock tank heater.

An evaporator plate solves condensation problems and an elevated radiator design maintains constant draft and eliminates hazards of dead air pockets. Heat baffles retain the heat in the coil for maximum efficiency.

A new double smokestack prevents much of the ordinary stack heat loss, and a stream-lined aluminum cap prevents downdrafts.

There are six models—100% automatic, light and heavy; semi-automatic, light and heavy; and light and heavy manually controlled heaters. *Siebring Manufacturing Co.*

45. Stock tank heater—The newest model stock tank heater of Johnson Gas Appliance Co. for installation in steel, concrete, and wood tanks features guaranteed condensate control, economical operation, ease of installation, safety, and portability.

New inventions and new modifications of existing equipment are broadening the field of fuel applications on the farm, helping the dealer to pick up the types of loads that will help him balance demand throughout the year. A new crop dryer that is completely portable, a new perimeter greenhouse heater, improved stock tank heaters—it is such products as these that open up new profit opportunities for the LPG operator.

The heater weighs only 37 lb, provides water at desired temperature, is weather-proof, eliminates tedious firing, and is built for years of service.

Johnson Gas Appliance Co.

46. Portable heater—The Yukon is an all-welded, heavy gauge steel portable heater that has been engineered and tested under severe conditions to assure low operating cost, simple and fast installation, and easy portability.

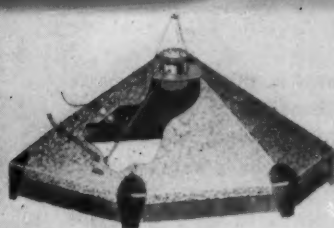
The heater, manufactured by H. D. Hudson, has a Bunsen-type burner with positive Unitrol controls, which results in minimum consumption of gas needed to maintain even water temperature. It holds water temperature within a 5° range. Condensation is quickly and easily disposed of by a drain at the lower end of the heater.

H. D. Hudson Manufacturing Co.

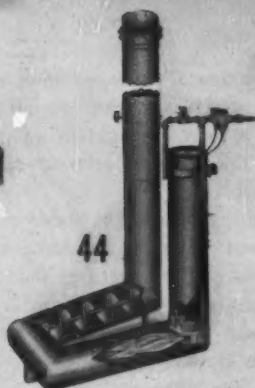
47. Crop dryer—The Farmotive crop dryer, made by Vapor Blast Manufacturing Co., is designed to dry any crop desired, especially grain and corn.

This dryer employs a new principle of generating indirect heat using propane gas. It is equipped with a 1-million Btu furnace and the fan is driven with a 28-hp gas engine or a 15-hp electric motor using three phase current. The heat exchanger is of unique design, employing a low temperature output principle which reduces the danger of fire. At no time is any part of the heating surface that comes in contact with the air stream from the fan more than 140°F.

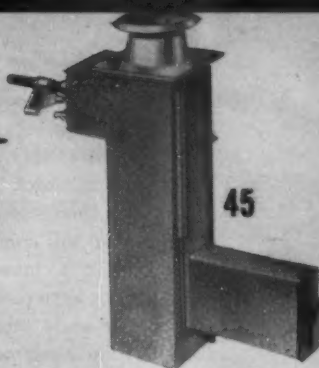
The unit is completely equipped with controls as well as safety devices. The dryer may be used for drying hay, either in a drying silo or for



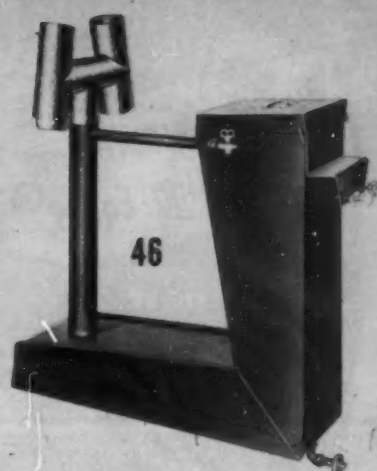
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46

mow drying. It is built on a trailer so that it may be moved from one job to another and is quite flexible. Vapor Blast Manufacturing Co.

48. Greenhouse heater—The Perimeter Plus greenhouse heater is a thermostatically controlled forced air 160,000 Btu unit that operates on the vacuum propulsion principle.

Model 160L will heat from 1500 to 10,000 sq ft of floor space. It is constructed of 16 gauge and 14 gauge boiler steel and comes in two sections. One is the heating section, the other the vacuum blower.

Heat from the thermostatically controlled gas-burning heater is drawn from the heater through stove pipe completely around the outside walls by suction produced by the vacuum blower placed at the exit end of the pipes. Using this thin walled stove pipe as a heat conductor, the heat very readily radiates and starts to warm the walls completely around the greenhouse within five seconds from the time the thermostat calls for heat. There is practically no afterheat.

L. B. White Co.

49. Weed burner—The Snorkel Jet propane weed burner has been designed for clearing irrigation ditches. It has given excellent performance both as to fire power and economy in burning weeds and brush in all character of ditches.

Because of the snorkel air intake pipe, the burner is never smothered out in the heaviest ditch growth and even extreme winds do not affect its performance, the manufacturer states.

The burners come in either four- or six-burner models, mounted on tank trailers that may be attached to

tractor or truck. There is also available a one-burner hand model.

For larger canals and highway rights-of-way, a long-reach model with more fire power has been perfected. It is called the Long Tom.

Snorkel Jet Co.

50. Hand burners—Manchester's new Super "8" L. P. gas hand burner will help balance summer load by increasing the off-season use of L. P. gas. The Super 8 is extremely light in weight (5¼ lb), with the lightest part at the end of the burner. The Super 8 is 8 ft long, thus keeping the heat of the flame away from the operator. Even in extremely hot weather, this LPG burner can be used for weed control. The 8-ft length also permits the operator to reach over fences and across most irrigation ditches.

The burner has an original Manchester trigger valve, which allows use of the flame only when it is needed. The Power Jet head is at an angle to the body of the burner; with just a twist of the wrist, the wider, longer angle-flame will give coverage of an entire ditch. Furthermore, the pet action of the flame decreases the amount of weight for the operator to control. The Manchester Super 8 has a heat-resistant, wind-proof pilot which is very easy to light. It also has a 250-gal. L. P. gas tank built to 250-lb API or 200 U-69 code.

The tank supplies ample fuel for the burner and can be used to fill tractor and truck tanks in the field (it has a separate liquid outlet for this purpose). The burner has a 6-ft, 270° swing boom, for maximum safety, is located on top of the tank, keeping the L. P. gas hose off the ground and away from wheels.

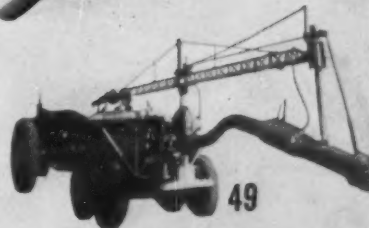
Manchester Welding & Fab. Co.



47



48



49



50

Pumps, Compressors and Fueling Equip.

what's new

Faster filling is one aim of improved equipment in this field. Quick-disconnect couplings, hose reels that permit handling of both hoses simultaneously, nozzles that are light in weight yet strong: these new developments match the greater performance being built into today's pumps and compressors.

One pump will double or treble the speed of bottle filling with older equipment, it is claimed. Tank car unloading using no compressor until all liquid has been removed is another feat that a new pump can boast of. And all the while, manufacturers are strengthening the construction of their fueling equipment and incorporating features that give better lubrication and assure trouble-free operation.

51. Hose reel—Liquid and vapor-return hoses may be handled simultaneously in the delivery of L. P. gas with the Clifford B. Hannay dual hose reel.

Both hoses can be paid out and re-wound as one. Two outlets are placed next to each other at one end of the spool so lines can be conveniently taped together at any desired interval. There is no separation of hoses on the reel. Both liquid and vapor-return hoses wind side by side around a continuous, smooth-surfaced reel with rolled edge discs at either end. On bottom wind reels tubular rollers ease hose on and off the drum, preventing scuffing, bending, or other damage.

The weight of the reel is supported on bronze bearings and is not carried by the forged steel ballbearing swing joint, which will withstand pressure up to 1000 psi.

Either explosion-proof electric or hand rewind are available.

Clifford B. Hannay & Son Inc.

52. Gas coupling — A quick-disconnect coupling bearing Underwriters' approval for L. P. gas has been designed to allow faster changing of tanks through its use of positive dog-locking action between the socket and nipple.

The unit's many uses include lift trucks, tractors, trailer bottle connections, large butane tanks, etc.

The Inst-O-Matic coupling is available in ¼- and ⅜-in. sizes. It has a valve in the socket and nipple to form a positive seal at both ends of the line. The coupling has an operating pressure of 1000 psi and can be purchased in an aluminum or brass socket and a steel or brass nipple.

E. B. Wiggins Oil Tool Co.

53. Safety hose nozzle — New alloy handle, guide, ring, and stronger inner body have been incorporated in the PW-200 safety hose nozzle.

The new handle is made of a high tensile alloy that provides the strength of steel, yet is light in weight. Wearing parts are hard-coated to make the new handle last 20 times longer than previous handles.

The new guide ring, which has the life expectancy of the nozzle itself, is made of aluminum alloy. The bearing surface of the lighter and stronger guide ring has been treated so that it is about the hardness of a diamond. Parkhill Co.

54. Fueling units—Viking Pump is now producing 20- and 30-gpm fueling and bottle filling units. Both are direct connected to 1750 rpm motors.

Service for bottle filling and bus, truck, and taxi fleet filling will be twice to three times as fast, it is claimed. The small bulk plant can also use these sizes for transfer pumping.

The 20-gpm pump includes a 1-hp, 1750-rpm motor, while the 30-gpm size includes a 1½-hp, 1750-rpm motor.

The pumps themselves are built similar to the one mounted on the GG196 unit. All sizes feature non-lubricated idler bearing; pump shaft supported by casing ball bearing and radial thrust ball bearing; vapor pressure safety relief valve on inlet port; new, enlarged safety bypass valve on pump head; O-ring head gasket for non-leak operation; and a simple, dry-liquid type mechanical seal.

The motors are explosion-proof

BUTANE-PROPANE News



type with built-in switch and voltage charger.

Viking Pump Co.

55. Rotary pump — Loading or unloading a 10,000-gal. tank car in approximately 2½ hours, without need for a compressor until after all of the liquid has been removed, is claimed by a new LPG and NH₃ rotary pump. It is designed to pump faster and more economically against higher differential pressures and at lower pump and engine speeds.

The design of the small rotary pump, which needs no vapor return line in the loading of a customer's tank, is such that there is no metal-to-metal contact. If and when wear occurs in the pumping chamber, only the carbon vanes need be replaced.

Hydrostatically tested to 1200 psi, and with 2-in. pipe openings, the pump can be set in any position. The base fits the average truck mounting without any change in piping.

The pump is available in 60-gpm and 100-gpm sizes for delivery trucks and bulk plants.

Superior Industries Inc.

56. Pump series—Specifically designed for L. P. gas service is a new series of pumps which will be available on Feb. 1 in three sizes: 1½-, 2-, and 2½-in.

Designed for safety, efficiency, and low maintenance, the new pumps feature high test ductile iron construction, O-ring gaskets throughout for positive sealing, mechanical seals for leak-proof operation, and optional bypass valve with discharge "to tank" eliminating temperature rise within the unit. Valves are sealed independent of the adjusting mechanism.

The units have been tested to 1250 psi hydrostatic pressure and 500 psi air pressure.

Fairbanks, Morse & Co.

57. Special endurance rotary pump — A newly developed line of LPG pumps offers mechanical advantages of the rotary universal-joint principle of standard Granco pumps, plus design refinements that produce special endurance factors for LPG service.

Special features include mechanical seals that eliminate leaking stuffing boxes; self-lubricating, friction-

free bearings; hardened and ground steel shaft sleeves; steel-sleeved stub shaft bearings; and radial thrust ball bearings and thrust collars that protect the pumps against power take-off thrust and pre-load.

A safety valve that is furnished on all Granco L. P. gas pumps is mounted in such a manner as to relieve pressure on both pump and line when valves are tightly closed on both sides of pump. The valve is factory-set at 150-lb pressure, unless otherwise specified. Also included in each pump is a built-in relief valve, which is easily adjustable in the field. It is factory set to give the pump a differential pressure of 40 lb.

Granberg Corp.

58. Truck pump—Roper has designed its L. P. gas pump specifically for truck service in recognition of the many problems of pumping LPG.

The pump mounts on the side frame or cradle. Both Hi-Drive and Lo-Drive types are available with inlet and outlet ports arranged to suit individual needs.

Hardened chrome alloy gears run in axial hydraulic balance. Four flanged bearings can be easily replaced when needed. An additional feature is the extra large grease reservoir to reduce maintenance. All main bearings are greased at one application, and LPG does not circulate in the grease chamber. The ball bearings on the drive shaft are sealed against road dirt and water.

Geo. D. Roper Corp.

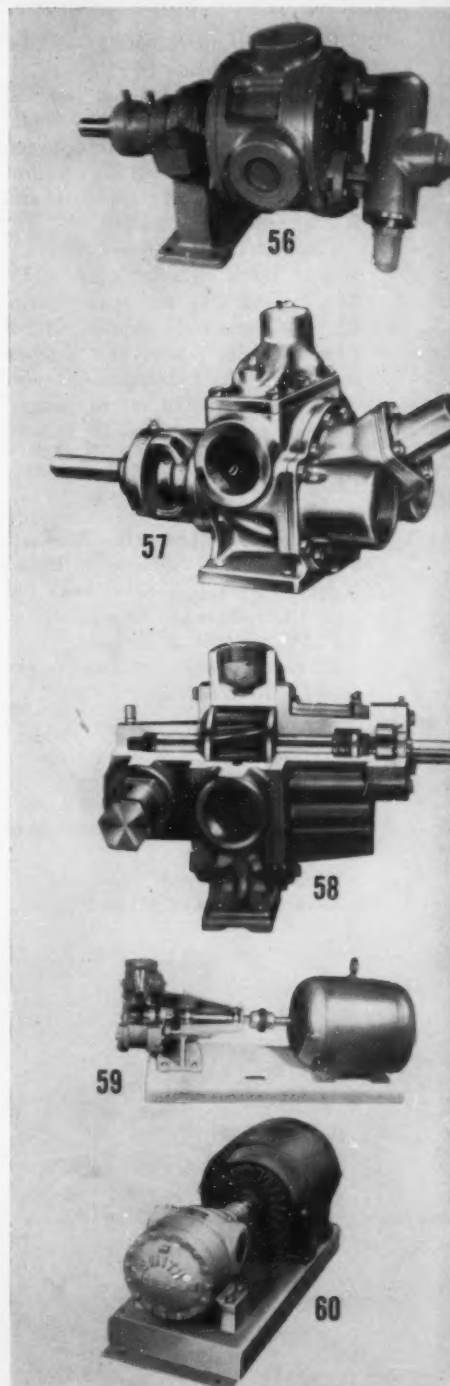
59. LPG-NH₃ pump—Roney Inc. is offering a new pump specially designed for use with both LPG and NH₃. The mechanical seal is kept constantly lubricated by an oil reservoir with a gauge glass which provides a means for wetting the seal face, thus protecting it against dry runs.

The pump also features sealed bearings, which eliminate the need for periodic bearing lubrication. It is constructed of iron with a stainless steel shaft, and is produced in a wide range of sizes to meet requirements from 7 to 100 gpm against varying differential pressures.

Roney Inc.

60. BPN pumps — All models of Smith butane-propane pumps, for both trucks and bulk plants, are be-

ing made available with Underwriters' label listing the pumps under the reexamination service. Approval has been granted under the recently completed "Standard for Power-Operated Pumps for L. P. gas." These pumps are interchangeable in every way with the "regular" MC and TC models that have been manufactured for many years. The new models feature a stronger case, which provides a greater safety factor against accidental breakage due to fire or shock.
Smith Precision Products Co.



what's
new

Power

On the Power front, fork-lift and industrial trucks are getting the largest share of attention. Additional refinements and improvements are coming along steadily in tanks, fittings and fuel controlling equipment. The increasing importance of fleet conversions is showing up in new prefabricated complete service station units as well as in new engines designed for use with LPG, and in additional models of LPG-fueled trucks.

61. Lift-truck cylinders—A new line of Prest-O-Lite L. P. gas cylinders for fueling lift trucks, designed in cooperation with the LPG industry and lift truck manufacturers, more than comply with full requirements of NBFU Pamphlet No. 58 and ICC Specification 4BA-240.

These lift truck cylinders are available in three standard sizes: 20-lb, 33½-lb, and 43½-lb propane capacity. All come fully painted with a zinc chromate primer and a finish coat of metallic aluminum enamel.

A wide variety of valves, gauges, and fittings are available for factory installation.

Linde Air Products Co.

62. Fork-lift brackets—Brackets for fork lift trucks made by Brake Manufacturers Inc. have been designed to reduce the time in changing LPG tanks to 30 seconds.

All brackets are guaranteed to exceed legal requirements by 400%.

Brake Manufacturers Inc.

63. Exhaust manifold—Ellis Manifold Co. announces that a new, improved "Dual exhaust" manifold is now in production.

The "Dual exhaust" manifold increases horsepower 10 to 20% and

boosts mileage approximately 10% by reducing back-pressure, according to the manufacturer. Engineered to operate with stock-intake, butane-intake or dual-intake manifolds, the Dual exhaust assures a simple installation because stock header pipes and mufflers are used, and in most cases no cutting or welding is necessary.

Ellis Manifold Co.

64. Vaporizer-regulator—The Ensign Model NS vaporizer-regulator unit is designed to operate with the Ensign L. P. gas carburetors on engines of 55 to 200 hp. Built of the special bronze, which is standard material for Ensign regulators, it has the water passages cast integral with the vaporizing body. This, according to the manufacturer, increases the heat transfer and vaporizing capacity.

Simplified design which eliminates the need for most adjustments is claimed for this model. Only one adjustment is provided, this being the idling mixture screw which follows the same design principle as on other Ensign regulators. Two stages of pressure regulation are provided, one before and the other following the vaporizer. The first stage reduces the pressure to approximately 10 psi, and

the second stage brings the pressure down to slightly below atmospheric, which provides positive shut-off of fuel when the engine is stopped.

The model NS requires no intermediate regulating unit, and is connected direct to the carburetor.

Ensign Carburetor Co.

65. Carburetor fittings—Power Manifold Co. has expanded its line of LPG carburetion fittings to include sizes from ⅛- to ¾-in. for water and vapor lines.

Water line fittings are brass and vapor line fittings are special die cast alloy, cut to standard pipe thread.

Power Manifold Co.

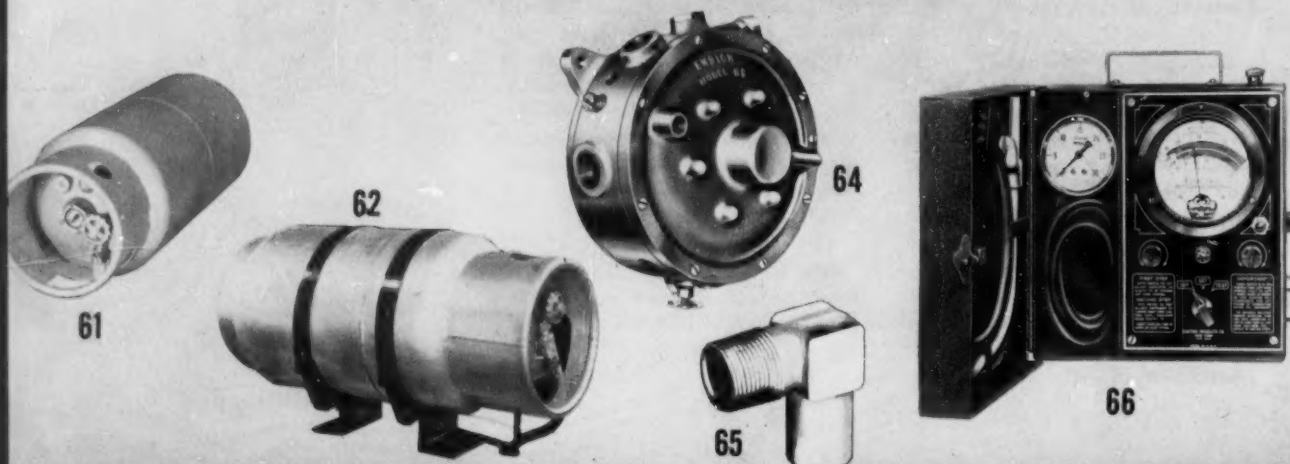
66. Combustion analyzer—Electro Products Co.'s Model EBC butane-propane analyzer is a heavy-duty combustion analyzer and built-in vacuum gauge which can be used for both shop and road tests.

The analyzer is made with a long-life, precision calibrated analyzing cell operating on the Wheatstone bridge principle, which gives a fast response to mixture changes and is not affected by exhaust moisture. It contains an aspirator pump, which allows recalibration without waiting, and is powered by self-contained batteries.

The built-in vacuum gauge has many uses, including indication of poor compression, late timing, valve condition, etc., which is essential in correcting before carburetors can be adjusted.

Electro Products Co.

67. Fuel controller—The Garrettson fuel controller, Model K, is, according to the manufacturer, smaller and lighter than most units available with the same capacity.



The liquid inlet is on the face of the unit where the connection to the fuel supply can be made from any direction. The inlet is protected with a screen to keep out dirt, etc., during installation. The high pressure seat is in the clean, liquid high-pressure side of the orifice where it tends to stay clean of dirt and foreign material.

The liquid passes through the water chamber before expansion for preheating and avoiding frost spots. It sprays out of four orifices and impinges on the heated metal surface.

The water chamber is cast-in to eliminate water leakage and gasket sealing problems.

The high pressure outlet pressure is 10 lb for good vaporizing.

The high pressure diaphragm also serves as a gasket between body and inner plate as well as a gasket for the secondary orifice.

The secondary section is a sensitive adjustable zero governor. It is on the outside side of the orifice so seepage through the primary seat will not lock it up tight. The orifice is sharp with a honed top surface and in both 1/4-in. and 7/16-in. diameter. The secondary seat will square itself to the orifice but will not rotate and cross indent.

An advantage to the serviceman is the adjustable lock off. Working pressure of the Model K is 325 lb. *Valley Industries Inc.*

68. Vapor regulator—The Beam 100, developed by Beam Products Manufacturing Co. (Parkdale), is a one-piece dry-gas regulator that eliminates bulky, separate mountings for primary and secondary regulators and spud-in housing blocks. It weighs only 3 1/2 lb.

Specifically designed for air-cooled engines, industrial trucks, and small

stationary engines where sufficient fuel storage is available for continuous vaporization, this one-piece unit also contains power and idle screw adjustments and offers positive shut-off without primers or chokes as starting aids.

Beam Products Manufacturing Co. (Parkdale)

69. Farm tractor tank—A Custom-Built 37-water gal. cross-mount L. P. gas fuel tank for the IHC "400" Farmall tractor is now available from Santa Fe Engineering & Equipment Co. Featuring extremely low positioning when in place, the easily installed Santa Fe Catalog No. F-38 tank permits greatly improved driver vision, yet ample gallonage, and presents a streamlined appearance.

Carefully planned placement of the tank valves results in greater convenience for the driver, reduced refueling time and safe top-mounting of the relief valve. The tank placement allows full use of all standard tractor-powered implements and attachments.

Santa Fe Engineering & Equipment Co.

70. LPG engine—The new LPG engine developed by Reo Motors Inc., builders of completely engineered L. P. gas engines, develops 220 hp.

Reo is able to obtain fuel savings in excess of 1 1/2 cents per mile and engine life is increased up to 200% over that of gasoline engines, according to the company.

When a major rebuild is necessary, the Reo L. P. gas engine costs about a third as much as is required to overhaul a diesel. This savings cannot be achieved by the conventional adaptation of today's average gasoline engines, which are designed for

75 octane fuel; a 115 octane fuel requires a 115 octane design.

Advantages in L. P. gas use in LPG engines are lower fuel costs, higher efficiency, no oil wash on cold starts, no oil dilution or contamination, longer periods between oil changes, no carbon deposits, less wear on cylinder walls, longer periods between overhaul, and less downtime.

Reo Motors Inc.

71. Dispensing unit—Designed to fit into the smallest possible space is the Dal-Worth Tank Co. Space Miser, a dispensing unit available in 1000-, 2000-, and 3000-wg sizes. Corresponding diameters of the tanks are 76, 96, and 102 in.

This unit can be furnished with many different sizes and makes of pump and motor combinations and metering equipment, all housed within the cabinet beneath the tank, with the exception of the Tex-Oil dispenser.

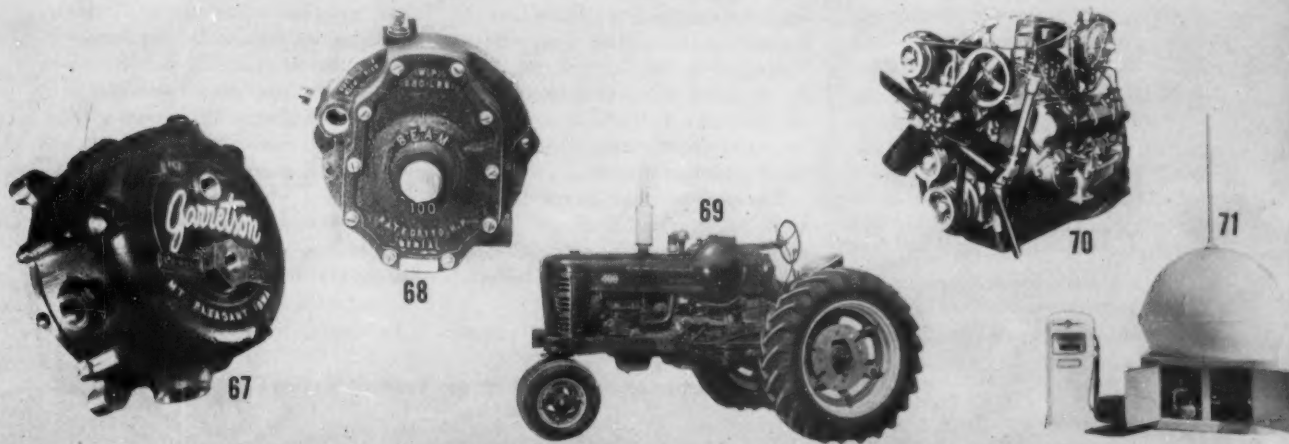
All pump and motor combinations have built-in starter switch, and the only outside connection necessary is the lead-in from the power supply. All piping to the meter and pump is housed within the cabinet, and the cabinet is fitted with a locking door. *Dal-Worth Tank Co.*

72. LPG fuel station—Cities Service Oil Co.'s modern L. P. gas service station is a 24-hour truck stop where all types of truck servicing and fuels may be had.

The latest safety devices have been installed, including a Shand & Jurs hydraulic valve protective system which provides for immediate close-off of all valves in case of a line break or fire.

Capacity of storage tank is 10,000 gal.

Cities Service Oil Co.



Delivery Equipment

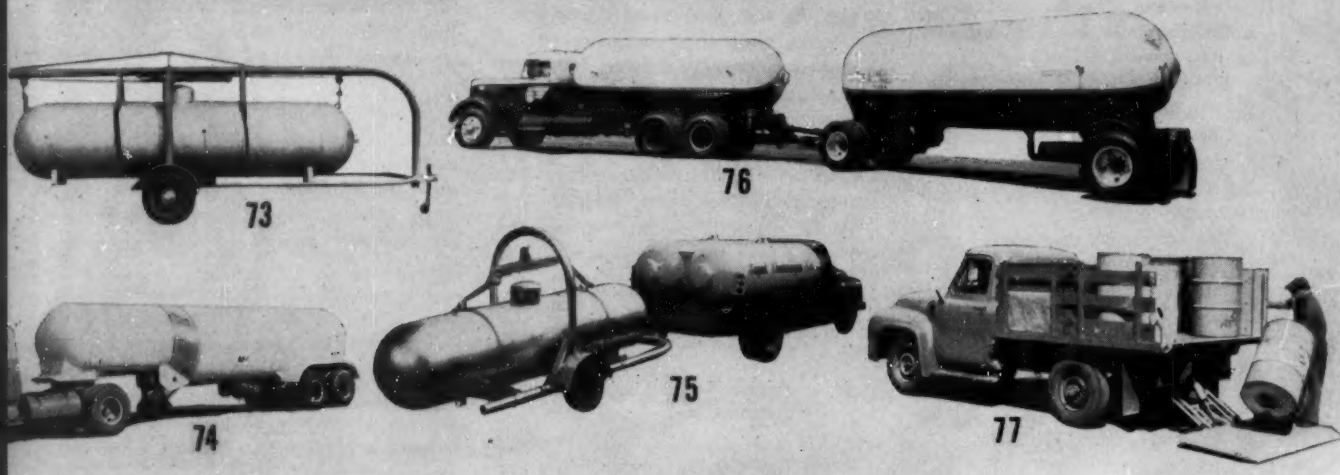
what's new

Truck tanks are being constantly lightened—yet strengthened—in order to give maximum payload with minimum weight. Step-down design is also being featured as a means of improving stability by lowering the center of gravity. Safety is also being heightened with such features as remotely controlled liquid shutoff valves. Trailers are also being constructed for easier, faster handling.

unit made with a 4-in. welded pipe frame. Standard equipment includes fenders, lights, third wheel, and a 1500-lb winch that has an anti-backlash safety feature built in. It will handle tanks up to 51 in. ID and 18 ft long.

United Petroleum Gas Co.

76. Frameless trailer—American Pipe & Steel Corp. has designed a frameless trailer transport tank to



73. Tank trailer—The Fisk hydraulic LPG storage tank trailer is a one-man operated unit that can handle tanks up to 1260 wg capacity and up to 1760 wg capacity on special order. The standard unit is 18 ft long by 50 in. in diameter. It weighs 1200 lb and will carry a load of 4000 lb.

The trailer is manipulated with a hand hydraulic system and it is possible to hoist a storage tank into a carry-away position in a few seconds. Fisk Trailer Sales Co.

74. Truck tank—Increased capacity, together with lowered center of gravity and decreased wind resistance, are offered in a new step-down LPG truck.

The front portion of the tank fits over the fifth wheel, while the back portion drops down to increase capacity and lower the center of gravity so that the tank rides better. It is fabricated of lightweight alloy materials.

The new tank, the Master Max No. 210, is built in various sizes and capacities to meet the maximum capac-

ity requirement for the state in which it will operate.

Master Tank & Welding

75. Truck & tank trailer—New additions to the truck line of United Petroleum Gas Co. are the UniTruck Speedloader truck and the Hitch-Hiker tank trailer.

The speedloader features a 1700-gwc tank with piping engineered to allow filling and unloading of domestic systems through the same filling hose. Both tank barrels, or one barrel alone, may be loaded by means of a single connection. All of the controls, the meter, and hose reel are located in a service compartment concealed in the skirt of the truck. As an added safety feature, this unit is equipped with liquid shutoff valves that are remotely controlled from the service compartment.

The complete tank unit is designed to fit five standard truck chassis and may be removed and installed on another chassis with a minimum of effort.

United's Hitch-Hiker is a rugged

give operators larger pay-loads at the same operating costs as before, and still meet state and federal requirements.

The new transport tank is constructed of new, light-weight, high-tensile steel. Each tank is stress-relieved, X-rayed, sand-blasted and primed before delivery. It has a gross capacity of 10,118 gal., or net propane capacity at 86¼ of 8726 gal. American Pipe & Steel Corp.

77. Lift gate—The Model 144 lift gate with 1000-lb lifting capacity has been designed primarily for the ¾- and 1-ton stake and van truck field. This lighter weight, lighter capacity hydraulic elevating tailgate also mounts on many larger trucks.

The platform is manual-spring closed, and comes in either ramp- or square-end general purpose styles.

Anthony now offers a complete line of lift gates for the smallest ½-ton pickup truck (800-lb lifting capacity) to the largest truck or semi-trailer with loads of up to 4000 lb.

Anthony Co.

what's new

Industrial, Commercial and Miscellaneous Utilization Equipment

78. Portable torch—Hauck portable gas torches are made for extra heavy duty and, although light in weight, have large capacity for big heating jobs—from annealing pipes and flanges to singeing hogs.

These torches are built without coils and require no preheating to start—they light instantly and burn steadily without ups and downs. They generate a maximum heat of 2200° flame temperature and are not affected by wind or weather.

Heat delivered by each size torch is adjustable over a wide range from a small heat up to the maximum Btu output.

Hauck Manufacturing Co.

79. Flood lights—A self-contained, totally weatherized propane flood light, the Til-Lee BL-64, is being produced by Wm. W. Lee & Son.

The ruggedly constructed portable unit provides a white light of approximately 6000 cp at maximum pressure for 50 hours at 15-lb pressure on a 20-lb tank of propane; 150 hours is provided on 3-lb pressure. Operating pressure may be controlled from ½ lb to 15 lb, depending on light requirements.

The BL-64 can be lighted instantly with a match. It is unaffected by weather and will operate in temperature down to 45° below zero.

The lantern uses a 300-lb test neoprene hose. Regulator has a No. 54 restrictor drill hole, and all fittings have been designed and tested for propane.

Wm. W. Lee & Son

80. LPG lantern—A “canned fuel” lantern, the “Air-O-Lite,” has been introduced by the Coleman Co.

The lantern burns 49% butane, with the balance pentane. The two gases are blended to achieve 25 lb of pressure at 100° F.

The Air-O-Lite lights instantly with a match. It uses a new Coleman “8500” fuel, which burns without smoke or soot. Each can of fuel gives four hours of bright white light under average temperature conditions. An efficient double-grip seal on the can prevents leakage.

The lantern is rain-proof and wind-proof, and its broad base gives stability, keeping the lantern from upsetting. The pyrex glass globe is not affected by heat.

Compact and easy to carry by its heavy wire bail, the lantern weighs 2½ lb with a full can of fuel. It is 13½ in. high and 5½ in. in diameter. Coleman Co.

81. Commercial incinerator—Three new commercial units have been added to Incinor’s full line of domestic incinerators which, by means of a high-temperature secondary combustion chamber, attain smokeless and odorless operation.

Controlled air is drawn in by venturi action to attain accelerated combustion, which produces very high temperatures and completely burns combustible gases and eliminates odors. The design also allows fly ash to settle in the chamber.

Extensive tests conducted by smoke abatement and air pollution committees, in accordance with ASME test code for dust-separating apparatus, proved performance that assures the new Incinor models’ acceptance under strict air pollution and smoke abatement regulations.

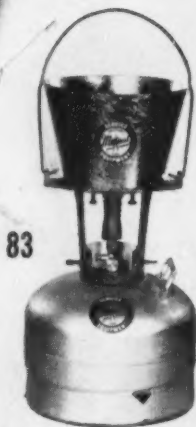
Bowser Inc.



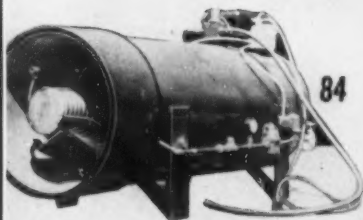
82. Broiler—Meats can be broiled quickly, efficiently, and entirely by incandescent radiants in a new broiler made by the Montague Co. The new broiler is fired by L. P. gas through a battery of three High-Glow 38,000-Btu burners that generate and maintain a temperature of from 1000° to 2500° F. A king-size



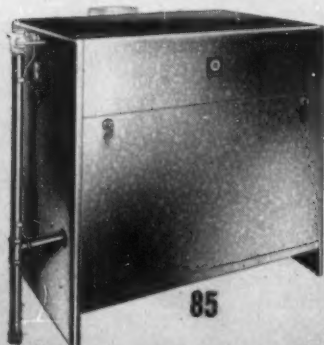
82



83



84



85

broiler, measuring 43¼ in. wide by 36½ in. deep and 69 in. high, it has a grill area of nearly 6 sq ft. The grid, which is constructed of loosely fitted, chromium-plated steel bars, measures 35 in. wide by 24 in. deep.

Ample even retained heat is assured for the oven above the burners by the use of tile on the oven bottom and overall fiberglass insulation.

Montague Co.

83. Furnace multiple valve—Mutual Liquid Gas Equipment Co. offers a major change in its line of furnaces with the introduction of the new No. 23 multiple valve for use on all Mutual tank-mounted furnaces.

This multiple valve replaces three previously used. It offers greater safety and ease of operation by combining the following features: (1) Excess flow check for instant shut-off of all fuel in event of excessive flow; (2) spring relief mounted sideways on valve so melted lead cannot clog opening; (3) ten percent; (4) filler-outlet connection; (5) new hand wheel replacing key.

The picture illustrates use of valve with Mutual's No. 2 plumber's furnace. Base of furnace has been redesigned to allow easy access to new hand wheel. This new valve is now standard with No. 3 sheet metal furnace and No. 2 portable heater.

In illustration the multiple valve is being used in conjunction with Mutual's No. 11 cylinder. It is also standard equipment on the Nos. 6 and 21 cylinders.

Mutual is prepared to supply the new valve for installation on tanks bought previous to the change. Two plugs will be shipped with each replacement valve to stop up existing holes in old tanks. The valve is a brass forging.

Mutual Liquid Gas Equipment Co.

84. Concrete curing heater — In making concrete blocks, the warm air - low - pressure, very - wet steam process of curing, using a Baumann concrete or cinder block curing heater, provides a lower cost means of producing a uniformly high quality block with no case hardening, according to the manufacturer.

This propane-fired heater is equipped with a copper coil in the front

that produces 214°F water in a matter of 2¼ minutes from cold water. The hot water is distributed through a series of nozzles placed throughout the kiln, usually along the ceiling. It is necessary to have a steady flow of 40-lb pressure in the water line to make the heaters work properly.

There is little maintenance required. The heaters operate automatically, thermostatically, employing a continuous spark. The units are completely odorless and produce a soot-free, clean air.

Arthur C. Baumann

85. Industrial boilers—Compactness, quick servicing, and low-cost installation are combined in two new gas-fired boilers introduced by American-Standard. Both the G-6 and G-4 boilers are constructed so that 20-gauge steel jackets can be assembled after water, gas, or steam piping has been installed.

The G-6, with its input capacity of 650,000 to 5.2 million Btu/hr, can be roughly classified as an industrial or commercial boiler suited to school, apartment and office buildings.

The G-4, with an input range of 180,000 to 600,000 Btu/hr, can be used in large homes, churches, and small industrial and commercial buildings.

Both boilers have integral draft-hoods located at the rear of the jacket enclosure. Overall height for the G-6 is 65 in. while the G-4 stands only 47½ in. high.

Cleanout cover plates provide ready access to flue surfaces. Removable access panels on the jacket front make boiler sections readily accessible without the necessity of removing the entire boiler jacket.

Hundreds of pin-like projections on each center section of both boilers provide a heating surface that could be equalled only by a much larger flat-surfaced section. These projections extract the greatest possible amount of heat from rising flue gases, resulting in maximum heating efficiency from minimum fuel usage.

Both models are constructed of durable cast iron and both comply with ASME specifications and are approved by the AGA.

American Radiator &

Standard Sanitary Corp.

(This section continued on page 86)

what's new

Tools, Accessories and Miscellaneous Equip.

A number of new tools and miscellaneous items of equipment are cutting corners for the dealer in his plant and speeding service to customers. A cylinder spinner-painter is one that promises to short-cut what can be a tedious job. An electric hack saw helps the pipe fitter by increasing the speed of cutting jobs ninefold and internal expanding wrenches permit him to obtain a firm, positive grip on a dozen different sizes of pipe.

Getting cylinders up and down stairs is now expedited with stair climbing trucks. Cylinder delivery bodies have new features that hold the load firm, other features that assist him in removing the bottles. Covers are also available for cylinders, cutting the risk of damage in handling.

Even the building in which the dealer carries on his business is now available in do-it-yourself form.

88. L. P. gas plant—Development of a self-contained, fully automatic packaged L. P. gas plant has been announced by American Liquid Gas Corp. The new line includes LPG vaporizers, vaporizer-mixers, and mixers only, and has been designed for use by industries and utilities.

With these packaged units, no outside source of power is normally required because they are entirely self-contained and are designed to operate at pressures from 1 to 5 lb, depending on the heating value of the mixed gas. The manufacturer states, however, that where higher pressure mixed fuel is required, or low pressure liquid is used, electrical power may be needed for auxiliary pumps.

Designed to provide regular or supplementary LPG service to any type of industry or public or private utility, the units are available in several models. Standard and high pres-

sure vaporizer mixers have capacities from 1000 to 50,000 cu ft per hr. Vaporizers come in sizes from 40 to 800 gal. per hr and mixers from 100 to 50,000 cu ft per hr. The vaporizers are either direct-fired, steam, electric, or hot-water-heated.

The mixers and vaporizer-mixers use the venturi-tube principle for their operation. Their purpose is to take butane or propane and mix it with air to produce a gas of any predetermined Btu content.

American Liquid Gas Corp.

89. Electric hack saw—A new heavy-duty, self-powered, portable electric hack saw has been designed for making straight, circular and random cuts in practically any material, including stainless steel, tempered aluminum, transite and mild steel. According to the manufacturer it is especially useful for maintenance and emergency work because it cuts nine times as fast as a hand hack saw.

This unit measures 15½ in. overall and weighs 6¾ lb, permitting it to be used in close quarters. The forward positioning of the pistol grip handle provides for balance, maneuverability and affords complete control when making cuts in any direction. With this new Key-Hak all 360° cuts can be made without changing hand positioning.

Strict adherence to "in-line" design permits the operator to make the high-speed reciprocating action (2500 strokes per minute) provides a burr-free edge.

The tool incorporates a 9/16-in. diameter shaft and extra heavy construction throughout, three ball bearings in the drive and crank mechanism. It is sealed in a special lubricant which protects all moving parts. *Key-Hak Division*

90. Vent pipe—William Wallace Co.'s new line of double-wall insulated gas vent pipe, RV Metalbestos, has been designed to withstand severe abuse and for convenient handling and easy installation.

The lightweight vent has the company's Rota-Lock coupler, which locks or unlocks pipe joints simply by twisting a coupler band. No screwing of joints is required.

For maximum protection from damage to the vent during handling and installation, a rugged steel outer pipe covers the thin aluminum inner pipe and provides for a built-in insulating air space. The fast-heating inner pipe creates a strong venting draft and enables quick, complete carry off of vent gases. The air space between the outer and inner pipe eliminates fire hazards and keeps the inner pipe hot and the outer pipe cool for optimum venting performance.

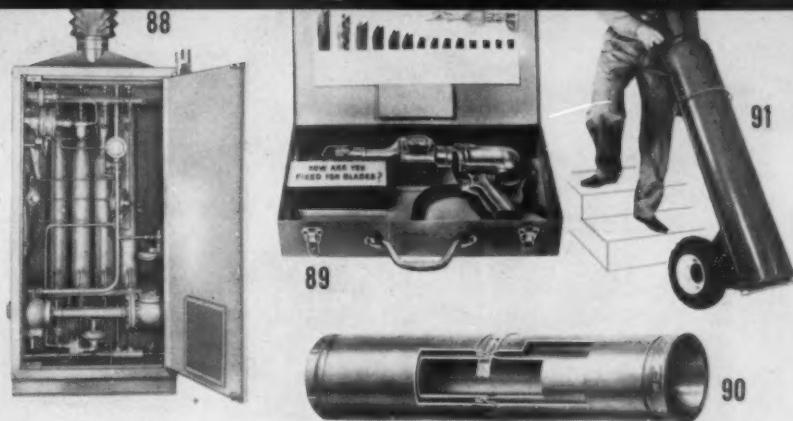
William Wallace Co.

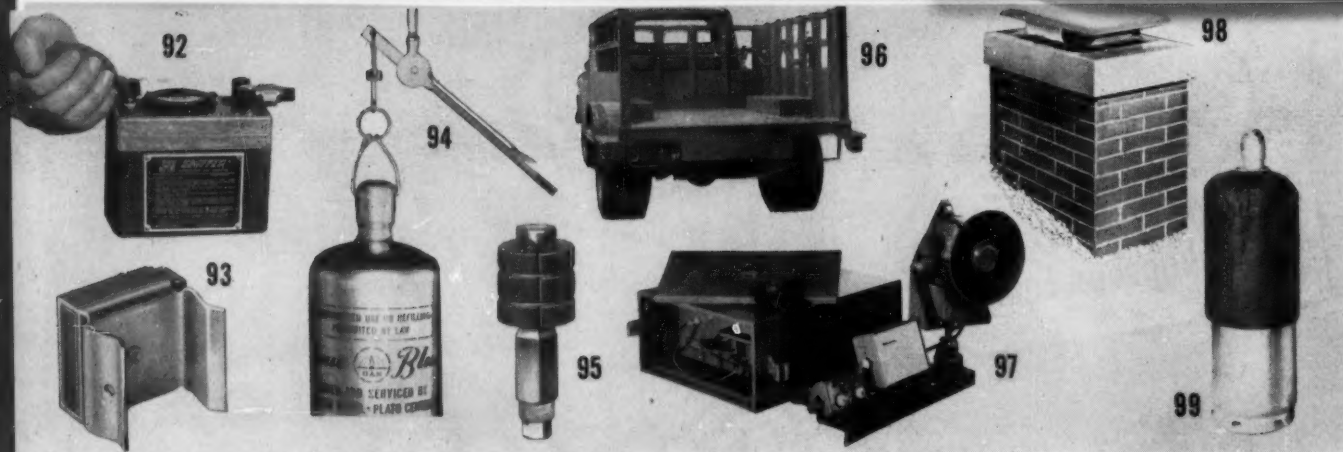
91. Stair-climbing truck—A stair climbing hand truck which is said to safely double the load a man can roll up steps and treble the load he can move down stairs or ramps has been announced by Valley Craft Products Inc.

Designated "Stair Cart," it is equipped with a special ratchet mechanism which enables it to roll up stairs step by step as the operator pulls a cable drive.

The two-wheel safety brakes which are incorporated in the truck tend to prevent accidents when descending ramps or stairs with heavy loads since the brakes allow perfect control at all times.

Six different models are available for handling various sizes of loads including a special barrel cart and a complete welding cart. The Stair Cart





is produced in both aluminum and steel.

Valley Craft has also announced a complete line of carts equipped only with brakes, instead of both brakes and power drive as used on the Stair Cart. The new line will also be available without brakes.

With the addition of the new models, the company will have a complete line of standard aluminum trucks with pneumatic wheels, making them ideal for handling gas cylinders over rough terrain.

Valley Craft Products Inc.

92. Portable gas detector — A light, simple, compact instrument for detecting combustible gases and vapors is provided in the new J-W Sniffer Model G. This portable indicator includes many improvements, two of particularly great importance to the routine user:

(1) To increase battery life, the on-off switch has been integrated with the aspirator bulb in such a way that grasping the bulb to draw in a sample automatically turns the indicator on. When the bulb is released, the instrument is shut off. This arrangement insures that the batteries will be used no longer than necessary and that the instrument will not be left on unintentionally.

(2) To speed sampling and to minimize operator fatigue, a new type flame-arresting system permits the use of an extremely soft aspirator bulb because of reduced resistance-to-air flow.

As in previous models, the new Model G is designed to be worn waist-high, suspended by a carrying strap around the neck, providing a maximum of operator convenience.

Other features of advantage in the

new unit include a rugged, corrosion-resistant fiberglass case; improved circuit which maintains maximum filament sensitivity, even in the presence of leaded vapors; hermetically-sealed indicating meter which is unaffected by moisture, dust, or magnetic fields; an easily replaceable combination flame arrestor and filament assembly; and a design which uses ordinary flashlight cell batteries, replaceable without the use of tools.

Size and weight reductions made in the new model bring case dimensions down to 3 in. x 4 3/8 in. x 5 3/4 in., and weight, complete with a complement of eight batteries, to slightly over 4 lb.

Johnson-Williams, Inc.

93. Mounting clips—Dwyer Magneclips eliminate complicated or makeshift mounting brackets and make a one-man job out of taking draft or pressure reading in hard-to-reach places. They also eliminate the need for an accessible flat surface on which to place portable draft gauges.

A "magneclipped" gauge clings to any steel surface—grips instantly and securely, and can be adjusted easily to an accurate, level, setting that won't shift or vibrate out of position.

Magneclips are drilled on one side and are fastened with a self-tapping screw to Flextube and Slacktube manometers. On gauges of solid plastic construction, the magnetic clips simply slide on by hand pressure and are secured to the gauge by strong spring action.

F. W. Dwyer Manufacturing Co.

94. Cylinder - spinner painter — Both time and paint can be saved in appreciable quantities through the use of a new "cylinder spinner painter." The device, from which the cyl-

inder is suspended while it is being painted, is especially designed for quick connection and disconnection, and incorporates a swivel joint to permit easy rotation of the cylinder.

The spinner painter suspends from either the ceiling or a wall bracket using 1-in. pipe. In hooking on the cylinder, the handle is placed in a vertical position. The two curved hooks which are attached to the lower end of the handle are placed in the slots in the cylinder cap. When the handle is pulled down it automatically locks, holding the cylinder in place off the floor. The ball bearing swivel joint in the hanger permits the cylinder to be revolved while paint is being applied.

The cylinder is as quickly disengaged as connected. Light pressure on the button unlocks the handle, and the cylinder may be lowered to the floor. When tension is released, the hooks slide out of the slots and the cylinder is ready to be removed. True Blue Oil Co.

95. Expanding internal wrench—When expanded in any pipe or tube of any material, the Tube Tule internal expanding wrench exerts a positive grip, which, regardless of any external wrench pressure applied holds without slippage. The knurled teeth grip metal, fiber, glass or plastic.

Tube Tule, produced by Double T Products Co., expands fully round. In operation, the wrench is inserted in pipe or tube, the small knurled round end is hand turned until a firm grip is obtained; then, if necessary, a wrench may be applied on the hexagon head to further expand internally. Expansion is accomplished by a simple physical principle—by using a screw to force the six split round sections up the bevel section of the nose of the tool.

The tool is made for internal use on ½-, ¾-, 1-, 1¼-, and 1½-in. pipe. Also made in Big Boy sizes for 2- to 2½-in., 3- to 3½-in., and 4- to 4½-in. *Double T Products Co.*

96. Cylinder - delivery bodies — The full line of all-metal welded cylinder delivery bodies offered by Hesse Carriage Co. features 3-in. angle-iron posts spaced to align the load against body sides, sturdy steps on each rear corner to assist operator in removing bottles, and large side panels and a rear panel for advertising purposes.

Heavy chains fitted with load binders hold the load in place. Side tool boxes are optional. Bodies are equipped with tail-lights and reflectors. No alteration of the chassis is required.

Pictured is Body No. 2144 on 1955 3600 pickup chassis. This unit carries 30 cylinders of 15-in. diameter. Hesse makes a complete line in this series.

Bodies may be shipped for local installation or can be installed on new chassis or old at the factory. *Hesse Carriage Co.*

97. Two-way radio — Operating flexibility and extra power to overcome high audible noise levels are two characteristics of a low-cost, "packaged" two-way radio system placed in production by Motorola for use in repair trucks or other vehicles. It provides a means of directing a work crew's activities as well as communicating with headquarters and other vehicles. It is especially recommended for use in industrial areas characterized by high audible noise levels from machinery, trucks, etc.

The system, consisting of receiver, transmitter, and power supply with an audio booster amplifier, fits into a standard 15-in. housing, takes up a minimum of space, and is easily installed. It operates interchangeably with either a 6- or 12-volt battery installation. Audio output is 10 watts; R.F. output is 25 watts.

The basic radio may be easily modified or added to in order to provide a custom installation at low cost.

The radio is designed for operation on one frequency (same as base station) or on two frequencies if system requirements so dictate.

Motorola Com. & Electronics Inc.

98. Tile liner—The flue sections

of the new gas vent to be introduced this year by Van-Packer Corp. will consist of a ⅝-in. fire clay tile liner with fluted outer edges and a cement-asbestos jacket.

Sections will be available in both 1- and 2-ft lengths. Inner diameter will range from 5 to 7 in. The Van-Packer vent is UL listed for Class B service and will suspend over the furnace.

Above the roof, a Van-Packer brick-panel housing will enclose the vent to provide an attractive appearance. The housing is constructed of fire-proof and weather-proof cement-asbestos and has brick red color and texture with depressed natural color mortar lines. The housing is also available separately to enclose metal gas vent pipes.

Van-Packer Corp.

99. Cylinder cover — A cylinder cover available from the Cylinder Protection Co. is designed to protect propane cylinders from damage in handling and transportation. They are slipped over cylinder heads before the heads are loaded on trucks and are transferred to the empties when deliveries are made.

The covers have been in service as long as six years and in many instances are still in excellent condition. They practically eliminate the expense of painting every time cylinders are returned and enable a dealer to always have clean-looking bottles on his customers' premises. They avoid the clanging and rattling that often occur during transportation and make for safer driving for employees.

The outside of the cover is made from 8-oz. olive drab cartite or drill. It is lined with ozite padding which is 100% animal body hair felt. The padding retains its resilience and softness after long hard usage. The outer cover of duck is water repellent.

Cylinder Protection Co.

100. Portable building — A portable low-cost building made by Pennington Manufacturing Co., is a true do-it-yourself building, engineered for ease of erection. The Hideaway buildings can be used for repair, machine, or work shop, or as a tool shed.

Constructed for long life without maintenance, the ribbed steel walls will withstand high wind pressure

and the steel roof is stamped for strength and bolted to truss supports. All parts of the Hideaway are treated to resist rust and weather and can be painted, if desired, to match surrounding structures.

Building measures 8 ft by 11 ft at the eaves. Base measurements are 7 ft 4 in. wide and 10 ft 4 in. long. Headroom is 6 ft 5 in. Height at peak is 7 ft 3 in.

Pennington Manufacturing Co.

101. Drill case—A metal gauging drill case is being manufactured by Anderson & Forrester. It contains 41 drills, ranging in sizes from No. 40 to 80, and offers a handy, accessible kit that the serviceman can use. Each drill has size stamped into the metal handle, and is arranged in sequence, so it can be quickly identified.

Each drill is fully protected and cannot break in the case. When case opens, the drills move outward so they are easily accessible. Kit is made of durable, lightweight steel and can be carried in hip pocket.

Anderson & Forrester

102. Saddle tee—M. B. Skinner's saddle tee is said to be a perfect fitting for installing washers, dryers, water heaters, softeners, ranges, and other appliances. The Skinner-Seal combines tee, union, and nipple in one fixture.

Extra heavy design assures a wide margin of safety for this Underwriters' approved tee. Broad friction contact prevents the saddle from jarring loose. All saddles are tested to hold 800 lb hydraulic pressure. They are made of malleable iron, cadmium plated, and are shipped complete with standard bolt and asbestos-neoprene fireproof gasket riveted in position.

M. B. Skinner Co.

103. Cylinder truck — This L. P. gas cylinder truck from Moellenbrock & Wilke facilitates bottle deliveries over sand, snow, and rough ground. Wheels are ball-bearing with pneumatic tires and separate inner tubes for easy repair. Handles are made of tubular steel of from 1-in. to 1¼-in. diameter, depending upon size of truck.

The trucks are finished in bright, rust-resisting aluminum. The smallest model is 23 in. wide by 48 in. high. *Moellenbrock & Wilke, Inc.*

Marketed Production of L. P. Gas

| Year | Gallons (in thou.) | % In- crease | Domestic & Motor Fuel ^a | % In- crease | Industrial Misc. (1) | % In- crease | Gas Mfg. | % In- crease | Chemical Mfg. | % In- crease | Rubber Components | % In- crease |
|------|-----------------------|-----------------|---------------------------------------|-----------------|-------------------------|-----------------|----------|-----------------|------------------|-----------------|----------------------|-----------------|
| 1922 | 223 | | | | | | | | | | | |
| 1923 | 277 | 24.4 | | | | | | | | | | |
| 1924 | 376 | 36.0 | | | | | | | | | | |
| 1925 | 404 | 7.2 | | | | | | | | | | |
| 1926 | 465 | 15.2 | | | | | | | | | | |
| 1927 | 1,091 | 134.6 | | | | | | | | | | |
| 1928 | 4,523 | 314.6 | 2,600 | | 400 | | 1,500 | | | | | |
| 1929 | 9,931 | 119.6 | 5,900 | 126.9 | 1,500 | 275.0 | 2,500 | 66.7 | | | | |
| 1930 | 18,017 | 81.4 | 11,800 | 100.0 | 2,200 | 46.7 | 4,000 | 60.0 | | | | |
| 1931 | 28,770 | 59.7 | 15,295 | 29.6 | 7,172 | 226.0 | 6,303 | 57.6 | | | | |
| 1932 | 34,115 | 18.6 | 16,244 | 6.2 | 8,167 | 13.9 | 9,703 | 53.9 | | | | |
| 1933 | 38,931 | 14.1 | 16,626 | 2.3 | 13,987 | 71.3 | 8,318 | -14.3 | | | | |
| 1934 | 56,427 | 44.9 | 17,681 | 6.3 | 32,448 | 132.0 | 6,298 | -24.3 | | | | |
| 1935 | 76,855 | 36.2 | 21,380 | 20.9 | 47,894 | 47.6 | 7,581 | 20.4 | | | | |
| 1936 | 106,652 | 38.8 | 30,014 | 40.4 | 67,267 | 40.4 | 9,371 | 23.6 | | | | |
| 1937 | 141,400 | 32.6 | 40,823 | 36.0 | 62,610 | (2) | 11,175 | 19.3 | 26,792 | | | |
| 1938 | 165,201 | 16.8 | 57,832 | 41.7 | 62,694 | 0.0 | 12,386 | 10.8 | 32,299 | 20.5 | | |
| 1939 | 223,580 | 35.3 | 87,530 | 51.4 | 93,723 | 49.4 | 15,435 | 24.6 | 26,892 | -16.7 | | |
| 1940 | 313,456 | 40.2 | 134,018 | 53.1 | 124,482 | 32.8 | 20,285 | 31.4 | 34,671 | 29.0 | | |
| 1941 | 462,852 | 47.7 | 220,722 | 64.7 | 172,669 | 68.6 | 25,255 | 24.5 | 44,206 | 27.5 | | |
| 1942 | 585,440 | 26.5 | 303,857 | 37.6 | 197,179 | 14.2 | 31,366 | 24.2 | 53,038 | 20.0 | | |
| 1943 | 675,233 | 15.3 | 344,962 | 13.6 | 237,396 | 20.4 | 37,519 | 19.6 | 55,356 | 4.4 | | |
| 1944 | 1,060,156 | (4) | 445,617 | 29.2 | 254,590 | 7.3 | 45,879 | 22.3 | 151,985 | 175.0 | 162,085 | |
| 1945 | 1,276,766 | 20.4 | 533,262 | 19.7 | 256,577 | 0.8 | 53,849 | 17.4 | 224,291 | 47.5 | 208,787 | 28.8 |
| 1946 | 1,704,262 | 33.5 | 758,466 | 42.2 | 253,745 | -1.1 | 86,660 | 61.0 | 311,499 | 38.8 | 293,892 | 40.8 |
| 1947 | 2,209,797 | 29.7 | 1,150,538 | 51.7 | 274,125 | 8.0 | 169,332 | 95.4 | 414,267 | 33.0 | 201,535 | -31.4 |
| 1948 | 2,736,801 | 23.8 | 1,473,289 | 28.1 | 275,883 | 0.6 | 237,638 | 40.3 | 524,350 | 26.6 | 225,641 | 11.9 |
| 1949 | 2,836,599 | 3.6 | 1,627,550 | 10.5 | 247,103 | -10.4 | 239,210 | 0.6 | 544,886 | 3.9 | 177,850 | -21.1 |
| 1950 | 3,482,567 | 22.8 | 2,022,464 | 24.3 | 355,456 | (3) | 251,694 | 5.2 | 624,468 | 14.6 | 228,485 | 28.5 |
| 1951 | 4,227,275 | 21.4 | 2,456,804 | 21.6 | 269,408 | (3) | 281,692 | 11.9 | 844,507 | 35.2 | 374,864 | 64.1 |
| 1952 | 4,477,379 | 5.9 | 2,636,736 | 7.4 | 338,959 | 26.0 | 259,697 | -7.8 | 870,990 | 3.1 | 370,997 | -1.1 |
| 1953 | 4,932,009 | 10.2 | 2,977,418 | 12.9 | 374,233 | 1.04 | 222,430 | -14.4 | 967,427 | 11.1 | 390,501 | 5.3 |
| 1954 | 5,125,533 | 3.9 | 3,174,012 | 6.6 | 401,615 | 7.3 | 191,932 | -13.7 | 1,050,239 | 8.6 | 307,735 | -21.2 |
| 1955 | 6,006,000 | 17.2 | 3,661,000 | 15.3 | 431,000 | 7.3 | 171,000 | -10.9 | 1,262,000 | 20.2 | 481,000 | 56.3 |

^aHousehold use plus other requirements by these customers such as irrigation pumping, tractor fuel, flame weeding, chicken brooding and similar uses. Included also is L. P. gas sold by domestic distributors but used for industrial purposes. Included also, in years following 1950, is L. P. gas sold direct by producers and marketers solely for fueling internal combustion engines.

(1) For all years prior to 1951, include L. P. gas sold for refueling internal combustion engines.

(2) Not comparable due to segregation

of chemical manufacturing.

(3) Not comparable due to change in method of reporting L. P. gas sold for refueling internal combustion engines.

(4) Not comparable due to inclusion of rubber components.

REMARKS: In this table total sales for all years except 1955 were obtained from U. S. Bureau of Mines reports. Distribution for the years 1931 to 1954, inclusive, was obtained from the same source. All other

volumes were estimated by the writers. The total sales volume includes all L. P. gas (propane, butane, and propane-butane mixtures) when sold as such. Until 1944 the sale of pentane when sold for any purpose other than motor fuel blending was included. Since then it has been excluded. It does not include butane when blended with heavier petroleum fractions for motor gasoline purposes. Inter-company sales transactions such as purchases of L. P. gas by one company from other companies and resold as L. P. gas have been eliminated in order to avoid duplication of sales figures.

The Annual Phillips Report

IN 1955

...a 17.2% Increase

The gain of 880 million gal. was the largest increase ever scored in the 33-year history of the LPG industry. Although the largest single jump in usage was in chemical manufacturing, an item far removed from the dealer's bailiwick, the remarkable increase in domestic and motor fuel uses shows that his own operations are enjoying a solid, steady growth.

LPG sales in 1955 top 6 billion gallons for first time in history

By George R. Benz
Paul W. Tucker
W. F. DeVoe
Phillips Petroleum Co.
Bartlesville, Okla.

L. P. gas sales in 1955 increased by a whopping 880,467,000 gal., which is the largest increase ever in the 33-year history of the industry. This represents a 17.2% gain over 1954 and is remarkable when one considers that the industry has been characterized by phenomenal growth. This increase caused total sales to soar over the 6-billion-gal. mark to an estimated 6,006,000,000 gal.

... *Domestic and motor fuel*, up 15.3% to 3,661,000,000 gal. Househeating is the largest domestic use—motor fuel fuel gains are impressive.

... *Industrial and miscellaneous*, increased by 7.3% to total of 431 million gal. L. P. gas proved its versatility by advancing in spite of continued natural gas extensions.

... *Gas manufacturing*, decreased by 10.9% to a total of 171 million gal. to continue trend started in 1951.

... *Chemical manufacturing*, use of L. P. gas even outstripped the upswing in the chemical industry by advancing 20.2% for a total of 1262 million gal.

... *Synthetic rubber*, use of L. P. gas for manufacture of synthetic rubber components, under stimulus of private ownership and record auto production registered biggest single category increase, 56.3% for a total of 481 million gal.

The chemical and motor fuel increases are significantly large. New uses continue to be found. Production, storage, and transportation facilities keeping pace. Outlook for 1956 is for continued growth—another record year.

The domestic and motor fuel market for LPG in 1955 is estimated at 3661 million gal. for an increase of 15.3% over 1954. This increase of 487 million gal. exceeds the entire industry sales in 1941. Househeating, which is the biggest single factor in the domestic growth, is spreading rapidly northward as people become acquainted with the cleanliness and convenience of L. P. gas. Expansion

and extensions of natural gas lines does cause some temporary dislocation of LPG customers though it helps by showing more people the advantages of gas and the net effect is that more people want L. P. gas. Central heating is on the up-swing, especially in the newer housing units.

Further indication of the trend toward househeating and larger individual users is the fact that tank sales are up about 25%. As contrasted to 1954, the summer sales of L. P. gas held up much better. The switch to L. P. gas for tobacco curing and crop dehydration continues. L. P. gas, having already established itself as the ideal fuel for plumbers pots, now finds a growing market as the best fuel for tar and asphalt kettles. LPG for weed burning and weed control is definitely picking up and should not be overlooked as a good load-builder.

The use of L. P. gas for motor fuel is one of the fastest growing uses. It is estimated that 671 million gal. of the fuel were used in internal combustion engines in 1955. This is a 22.6% increase and represents about 11% of the total industry sales. Motor fuel gains were significant in nearly all parts of the country. The biggest users are: trucks, industrial trucks, tractors, buses, irrigation and drilling engines.

There are now more than 250,000 L. P. gas tractors in the United States.

Tractor conversions were up 71% for the first six months and carburetor sales (excluding those for tractors) were up 87%. In some areas, dealers report that L. P. gas tractors are out-selling gasoline or diesel units 10 to 1.

Truck fleet operators are changing to L. P. gas as service station facilities become more numerous and accessible. Recent surveys show more than 3350 locations where LPG motor fuel service is available. Taxicab fleets are also being converted. Truck fleet operators are interested in L. P. gas for more reasons than lower oil consumption, less ring wear, and more mileage between overhauls. It is proving to be the answer to cargo refrigeration and cargo heating. Cities are finding it advantageous to convert their road rollers and garbage trucks to L. P. gas. Ready-mix-type concrete trucks are finding LPG doubly advantageous because it is as desirable for the small motor which turns the mixer as it is for the large truck motor—easier to fuel and maintain.

The interest in L. P. gas for industrial tractors and lift trucks, which really made tremendous gains in 1954, continue in 1955. The fact that maintenance is reduced and that there are less noxious odors in the L. P. gas engine exhaust are only two reasons why many fleets of such units are being converted. Most of the larger lift-truck manufacturers now offer U. L.-approved factory-



G. R. Benz
Manager,
Engineering Dept.



P. W. Tucker
Technical Rep.,
Engineering



W. F. DeVoe
Assistant to
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For ICC Cylinders
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Same as 7540 but
with Integral
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(Buses, Trucks,
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Threaded Pipe-away
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Ideal for ICC
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More numerous and accessible LPG motor fuel service stations help sell truck fleet operators on L. P. gas. Recent surveys show more than 3350 stations in operation.

equipped models. Aircraft and auto manufacturers, airlines, steel mills, food processors, chemical plants, and lumber mills are only a few of the larger industries who are converting their materials handling equipment to L. P. gas.

The use of LPG for irrigation pumps continues to increase in spite of the advances of natural gas in this market. A recent survey of 33,537 irrigations wells in the high plains area of Texas showed that 46% used L. P. gas, 35% used natural gas and the remainder either gasoline, diesel fuel or electricity.

Practically all major L. P. gas appliances show a healthy sales in-

crease in 1955. Range sales increased an estimated 11% for a total of 455,000. Sales of automatic LPG water heaters are estimated at about 350,000—almost 13% over 1954. L. P. gas warm air furnace sales are estimated at 71,800 or 8.4% of the total of this type of gas appliance. Direct heating appliances and recessed wall units total 286,900—19% of the total. LPG floor furnaces represented 25% of the total, or 40,000 in 1955.

The demand for L. P. gas for industrial and miscellaneous uses totalled 431 million gal., which is an increase of 7.3% over 1954. Although natural gas took over some of this market, the increased level of over-

all business activity and new applications kept this market on the increase. L. P. gas for flame cutting is making gains. One interesting new market is the use of the fuel in uranium refinery operations. Standby plants are being added to take advantage of interruptible rates and as a protection against winter shut-down. The severity of the winter, however, is the determining factor.

The utility use of LPG is estimated at 171 million gal., or a decrease of 10.9% as compared to 1954. The swing to natural gas is the story here, although L. P. gas is proving popular in new housing developments. There is an important industry development though in the increased cooperation between gas utility companies and the L. P. gas industry. More joint gas promotion was seen in 1955 than any year in history. This will doubtless continue with increased benefits to all.

Sales of L. P. gas as a raw material for the manufacture of chemicals and chemical intermediates showed 20.2% increase over 1954 with an estimated volume of 1262 million gal. This increase can be attributed to the rapid growth of the petrochemical industry and to the high rate of industrial activity throughout the year. The increased demand for ethylene resulted in large volumes of L. P. gas being used to supplement ethane as a base material. This trend should continue into 1956 as large ethylene and polyethylene plants now under construction are placed in operation.

New processes for the manufacture of glycerine and phenol from propylene and the production of nitro paraffins and its derivatives, primarily from propane, were highlights in new uses of LPG that developed during the year. Furthermore, propane and butane will probably remain for some time the most efficient and economic raw materials for oxygenated chemicals.

If one were to combine the chemical sales with that which goes into the manufacture of synthetic rubber components (which is really a chemical use), the volume would total 1743 million, or nearly 30% of the entire market.

The use of liquefied petroleum gas in the manufacture of synthetic rubber components jumped 56.3% to a total of 481 million gal. This is the largest single category percentage in-



Motor fuel gains—22.6% over 1954—were significant in all parts of the country. Among biggest users are industrial trucks like this fork lift, trucks, tractors, buses, irrigation and drilling engines.



Paul Le May

...help when needed

When you have a problem by the tail it's good to have a helping hand. Regular customers of Sid Richardson Gasoline Co. know they can count on us for assistance, because our success depends on the success of our customers. We have no company-owned wholesale or retail outlets to require our attention or to use your product supply.

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ST. PAUL, MINNESOTA

WILLIAM T. CARL
3105 DEWEY
OMAHA, NEBRASKA

HOW THE MARKET DEMAND WAS DIVIDED



DOMESTIC AND MOTOR FUEL

Total Sales: 3661 million gal.
15.3% increase

Househeating is still the biggest single factor in domestic growth and it is spreading northward. Internal combustion engines used 671 million gal. of LPG in 1955, representing about 11% of total industry sales. Significant gains were shown in all sections of the country.



INDUSTRIAL AND MISCELLANEOUS

Total Sales: 431 million gal.
7.3% increase

Increased level of overall business activity and new applications kept this market on the increase. An interesting new application is the use of L. P. gas in uranium refinery operations.



GAS MANUFACTURING OR UTILITY

Total Sales: 171 million gal.
10.9% decrease

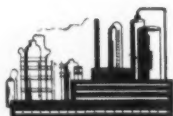
Again the swing to natural gas is the problem here, although LPG is proving popular in new housing developments. Cooperation between the L. P. gas and natural gas utility industries is increasing: 1955 saw more joint gas promotion than any previous year.



CHEMICAL MANUFACTURING

Total Sales: 1262 million gal.
20.2% increase

Rapid growth of the petrochemical industry and the high rate of industrial activity brought about the increased demand for LPG, which is being used to supplement ethane as a base material in ethylene manufacture. This trend should continue in 1956, when plants now under construction are put into operation.



SYNTHETIC RUBBER

Total Sales: 481 million gal.
56.3% increase

This is the largest single category increase, made significant by the increase in synthetic rubber production which started with the switch to private-industry operation in April. Largest automobile production in history and the trend toward tubeless tires as new-car equipment help swell the market.

crease of any of the major markets. It is significant that since the switch to operation by private industry late in April, synthetic rubber production has been at a rate 17% above that of the first four months.

The capacity operation of the industry stems from an unprecedented demand for synthetic rubber and specifically from the largest automobile production ever. It is anticipated that industry will produce nearly 8 million automobiles in 1955. About 6,666,000 were produced in 1950, the largest previous year.

The trend toward tubeless tires as new equipment on most automobiles has resulted in an even greater percentage increase in tire production than is reflected by the gain in automobile production alone. This is caused by the necessity of manufacturers and dealers to carry inventories of both tube and tubeless tires. Other factors include higher prices for natural rubber (over 1954) and increased exports since the synthetic rubber industry was taken over by private industry.

It is believed that the present high rubber demand will continue during the coming year. Private industry has demonstrated a high production capacity and several have announced major expansions.

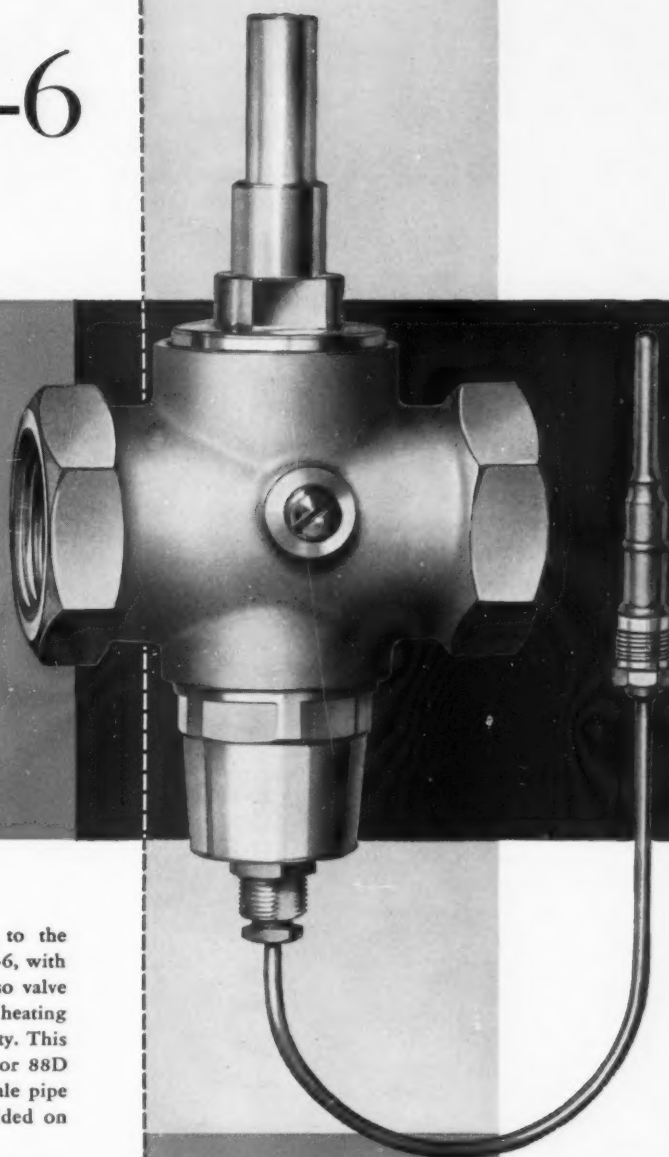
A trend is developing in the refining industry toward increased use of butylenes in the production of high octane motor fuel. For numerous refiners, this is the cheapest, and for some the only means of meeting the higher octane requirements of today's automobile engines. A butylene shortage has already developed and will become more critical as octane numbers are pushed higher and higher. Thus, future butadiene manufacture will depend more and more upon normal butane as its raw material.

Supply

The production capacity of the L. P. gas industry continues to increase. Twenty-two new plants came on stream in 1955 with a total production capacity of nearly 850,000 gal. per day. It is estimated 12 new plants will be added in 1956 with a production capacity approaching a half a million gallons per day. The industry has the potential production capacity to meet large additional demands. With the incentive of a mod-

No. 807-6

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Now, we have added another member to the famous family of Baso valves—the Model 807-6, with a capacity of 270,000 Btu/hr. This new Baso valve is the automatic pilot you need for central heating units and other gas appliances of large capacity. This valve uses any thermocouple of the Nos. 80 or 88D MGSCO Series. Inlet and outlet are 1" female pipe thread. A 1/8" F.P.T. pilot tapping is provided on each side of the body.

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You'll appreciate the Model 807-6's clean design, sturdy construction, and Baso dependability. It's a real sales asset to your line of modern gas appliances. Investigate it, today.

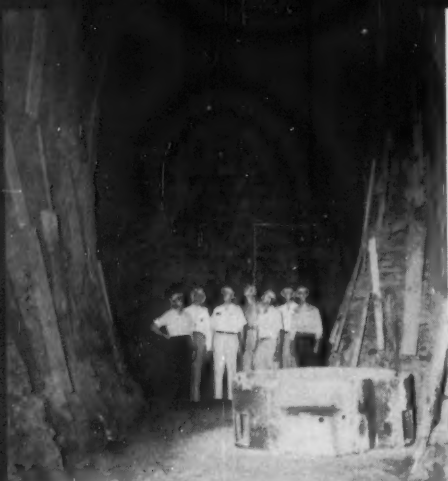
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In addition to the 602.7 million gal. of LPG stored underground, there is 292 million gal. of underground storage either under construction or proposed. Most underground storage is in salt beds or domes, but one cavern in chalk was being completed in 1955 and another in solid granite is in the planning stages.

erately higher market price, larger quantities could be recovered from existing plants.

Large increases were seen in 1955 in L. P. gas storage facilities in both the conventional aboveground steel storage tanks and in underground storage facilities. It is estimated that underground storage capacity presently available totals 602,700,000 gal. There is an additional 292 million gal. of underground storage either under construction or proposed. If all of this storage is completed as planned there would be an ultimate total capacity of 894,700,000 gal. of underground L. P. gas storage. Although most of the underground storage is in salt beds or domes, one cavern in chalk was being completed in 1955 (while one in solid granite was being planned). According to the most recent figures, about 400 million gal. of L. P. gas were in underground storage prior to the heavy withdrawal months in the last quarter.

There was more interest shown in refrigerated storage of LPG in 1955, but none definitely announced. Such storage would be in insulated vertical tanks at low temperatures and pressures.

Significant additions to the L. P. gas transportation facilities were seen in 1955. One new ship (L. P. gas tanker) is being readied for Caribbean service. One new ocean-going LPG barge was added to the water fleet. Seven products pipelines were announced or under construction which will be equipped for products

and L. P. gas transportation. It is estimated that there are about 20,000 tank cars in L. P. gas service. Because many tank cars are in dual LPG and anhydrous ammonia service, the number in L. P. gas service during peak demand periods may even exceed this number. Transport truck movements continue to increase. It is estimated that nearly 50% of the L. P. gas movement is by transport truck.

Export and foreign

LPG export sales are up about 10%. L. P. gas distribution is making rapid strides in Canada, Venezuela, England, France, Italy, Mexico, and in the Scandinavian countries. There is at least one L. P. gas tanker operating out of Italy, and three tankers operating in the Scandinavian countries, and at least four more LPG tankers in service in other ports. There are two butane barges in Holland.

L. P. gas men have a big stake in the Harris Bill passed last summer by the U. S. House. A companion measure, the Fulbright Bill, is now awaiting action in the Senate. This important legislation would retain for consumers the benefits of competition but lift utility-type federal regulation from gas producing.

Already federal regulation of natural gas producers seems to be decreasing supplies of natural gas, from which nearly 70% of L. P. gas is derived. Latest drilling records show a 12% decline in gas well completions in 1955. Also indicating a future decline in production, only 2.3 trillion cu ft of new gas reserves were committed to large interstate pipelines in 1954, compared with 6.4 trillion in 1953. If this trend is not halted

by passage of the Harris Bill, L. P. gas dealers will be faced with shorter supplies and higher prices.

The Federal Power Commission has recently said its authority extends back to sales of casinghead gas from each individual well, which is before L. P. gas is extracted, if any of the residue gas is destined to move in interstate markets.

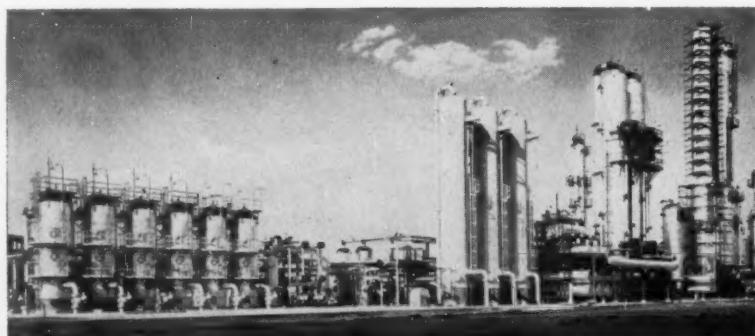
And, if federal regulation of gas production is allowed to continue, what will stop it from swallowing up other segments of the petroleum industry—including L. P. gas? Thus, the life of the L. P. gas industry as a free competitive enterprise is endangered.

Outlook

The increase in sales for 1955 was the largest in the history of the liquefied petroleum gas industry. In fact, the sales for 1955 alone far exceeded the total sales for the first 24 years of the industry. Or putting it another way, the amount of L. P. gas sold in 1955 exceeds the total amount sold in all of the years prior to 1946. Competition in the fuel market remains keen and the L. P. gas industry must maintain its alertness and initiative if it is to continue to grow.

Complete weather conditioning is just around the corner. This is a "natural" for the gas industry and offers tremendous opportunities for the future growth and for smoothing out the winter-summer ratio. Weather conditioning, motor fuel, and househeating applications are the markets offering the greatest sales potentials for the L. P. gas dealer. L. P. gas for chemical purposes will continue to rise significantly.

1956 should be another spectacular growth year for the industry. ■



Large volumes of L. P. gas were used in new chemical manufacturing processes and in the rapidly expanding petrochemical industry, raising consumption 20% over 1954.



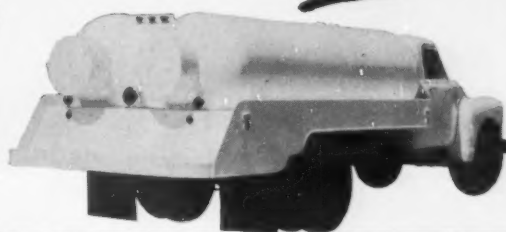
LOOK AT IT *THIS* WAY!

Don't lose peak season profits by waiting on tank deliveries. When you deal with McNamar the year around you are assured of immediate deliveries during any season.

Whether it's a 115 gallon to 1000 gallon domestic system or a 6000 to 30,000 gallon storage tank, we can meet your requirements for size, quality of workmanship, and speed of delivery.

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Confidence...

Like the airline pilot who places complete confidence in an airport beacon to help guide him . . . you can place complete confidence in Beacon Petroleum to guide you through your busiest season. The finest quality Butane-Propane, delivered where needed, when needed has made Beacon a leader in the LPG field. Beacon Petroleum has the facilities to help *your* business grow . . . why not investigate?



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NGAA Butane-Propane

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to meet your every need

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to meet seasonal demands

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BEACON

PETROLEUM COMPANY

TULSA • HOUSTON

Look for new highs in LPG sales again in '56

By Gene Masters
Director of Research
Butane-Propane News

YEAR-END reports of the professional forecasters indicate that 1956 general business will be close to the highs set last year. Points to watch closely will be the expected drop in new housing starts—which may be partially offset by remodeling and repairs—and a possible tightening up on credits and collections.

With general business on a relatively stable plateau, the outlook for the LPG industry, already sporting one of the flashiest growth records of any industry, is for still higher peaks in sales volume in all cat-

egories. Trends established in the past decade help to point out the direction the industry will travel to reach these new peaks.

... Increase in marketed production of LPG

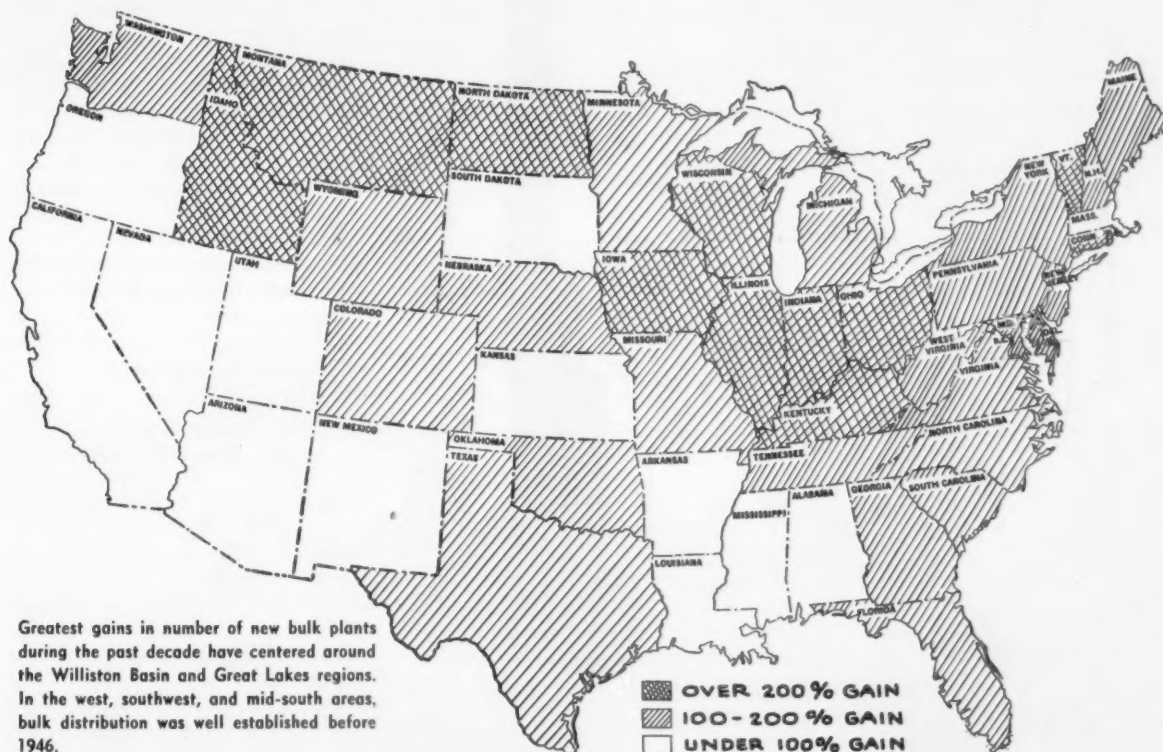
From 1946 through 1954, marketed production of LPG tripled, with an increase of 3.4 billion gallons. Two divisions—domestic & commercial and internal combustion—accounted for two-thirds of this gain. Combined, they accounted for 51% of

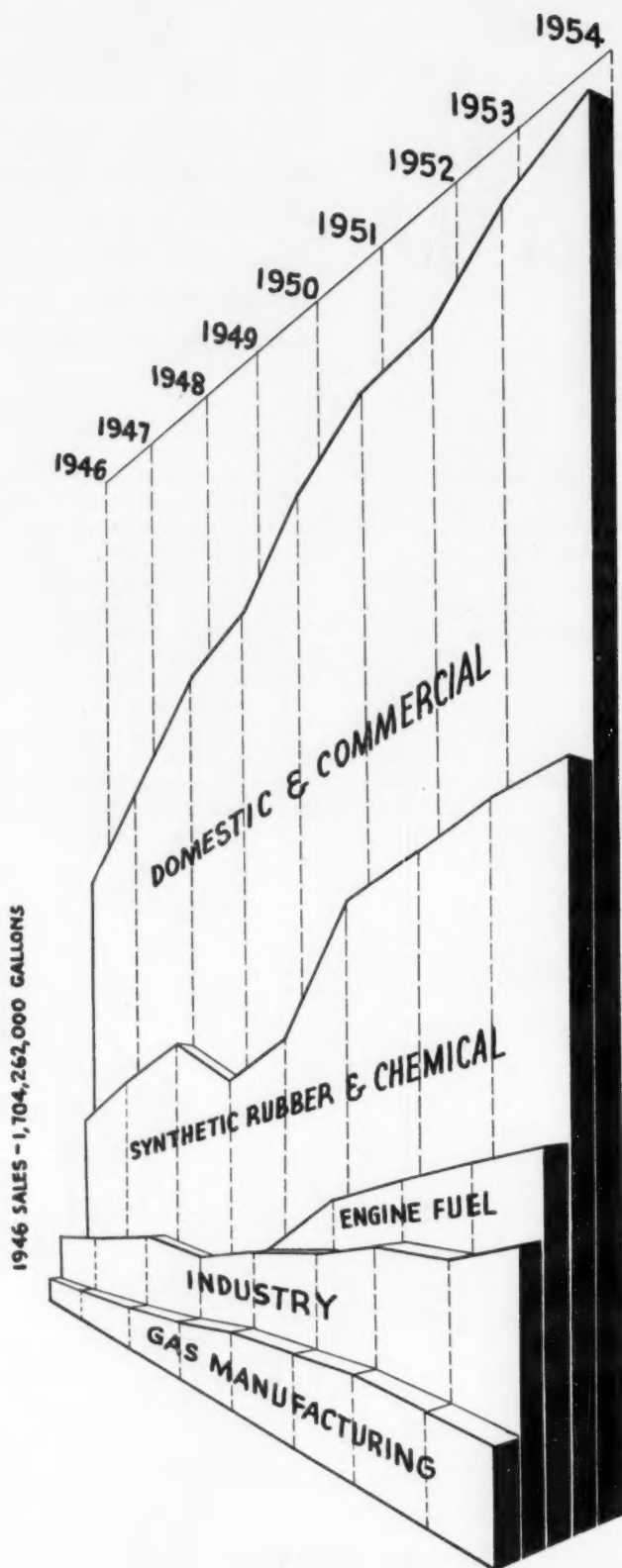
The emphasis on the farm market grows heavier as dealers turn to its many applications to boost off-peak sales. But the potential is still fantastic in its proportions.

total sales in 1946 and 62% in 1954.

The LPG dealers are directly responsible for these gains, which reflect increases in number of customers as well as increased consumption per customer. The LPG dealer is becoming a better merchandiser and businessman in soliciting new accounts while continuing to hold on to present users.

A relatively few large consumers are responsible for the LPG sales volume in gas manufacturing, synthetic rubber, chemical and industrial uses. The installation of still





more stand-by plants, the shift of industry to the suburbs, and the rapid growth of the chemical industry are all indicators that these markets are healthy, and will continue to use an increased volume of LPG in 1956.

There is every reason to expect total marketed production of LPG to set new records for the next several years.

... Continuing trend to bulk distribution

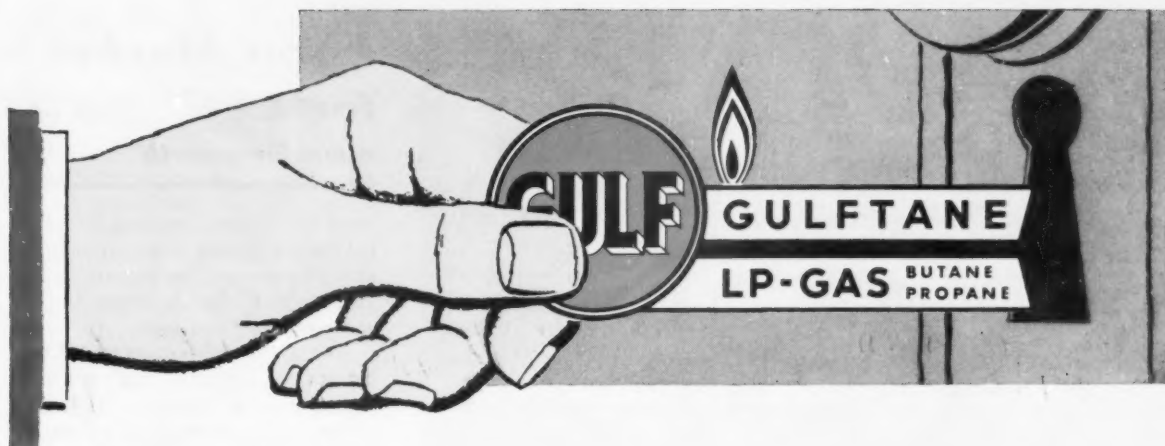
In 1946 there were approximately 2500 LPG bulk plants operating in the U. S. During the past year the total passed 6000. Storage capacity has grown rapidly—at dealer plants, in underground reservoirs, and at the consumer level. Much of this increase has come in areas that in the past were subject to annual spot shortages. Transportation of bulk LPG has also gained flexibility with more tank cars, motor transports, and bulk trucks of all types in use. Taken together, these facts have given the dealer more assurance of adequate supplies of fuel, and made it possible for him to give more sales emphasis to multiple uses by the domestic customer, broadening of farm applications, and development of better equipment and techniques for conversion of internal combustion engines.

Economic and competitive factors make it certain that the shift to bulk distribution will continue at an accelerated pace. It is not likely, however, that the total number of bulk consumers will equal or pass the number of cylinder consumers in the next few years. The portability and low cost of cylinder installations make them the most practicable units for the small domestic and commercial accounts, trailers, resort areas, and to introduce LPG to the new customer.

... Space heating, the largest domestic load

Space heating with LPG offers the largest gallonage potential in the domestic market. Ten years ago the space heating market was relatively undeveloped. Confined in the main to the southern U. S., installations were largely of the portable or radiant heater type.

Widening of the bulk distribution areas and growth in bulk storage



This key can open the door to greater LP-Gas sales...

Here are three good reasons why it will pay you to buy Gulftane LP-Gas:

1 High quality—Gulftane is produced in plants of the latest design under accurately controlled conditions to specifications that meet the highest standards adopted by the LP-gas industry. It is free of moisture, gum, tar, dust, dirt, and sulphur. Or, to put it another way, Gulftane is the same high quality as Super-Refined No-Nox Gasoline and the other well-known products that carry the familiar Orange Disc trade mark.

2 Dependable supply — many natural gasoline plants and refineries, plus adequate storage, assure reliable, continuous supply.

3 Prompt delivery service—modern Gulftane producing plants strategically located throughout Gulf's wide-spread marketing terri-

tory, along with a fleet of new tank cars, assure prompt, efficient delivery service.

Also ready to serve you is Gulf's experienced engineering and marketing personnel. Get all the facts concerning Gulftane service—contact your local Gulf District Office or your nearest Gulf Division Sales Office (see addresses below).

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Philadelphia 2, Pa.

National Bank Building
Toledo 1, Ohio

P. O. Box 1679
Denver 1, Colo.
(Zone Office)

230 No. Michigan Ave.
Chicago 1, Ill.
(Zone Office)



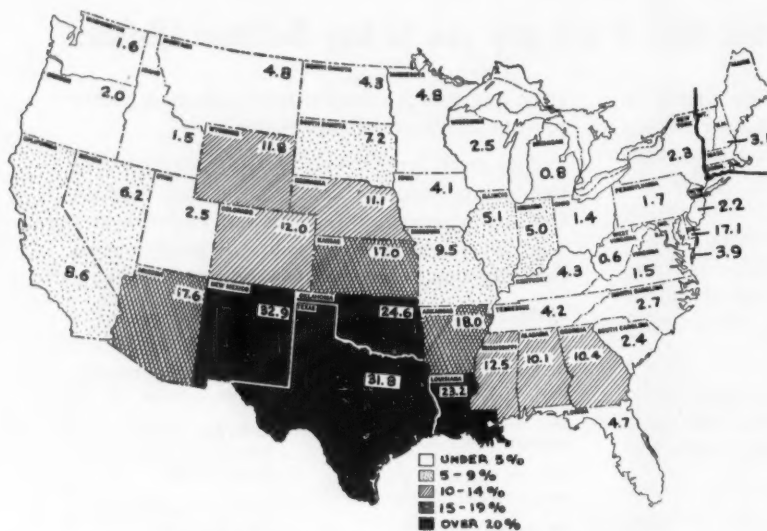
**GULF OIL CORPORATION
GULF REFINING COMPANY**

1822 Gulf Building, Pittsburgh 30, Pa.





(Above). Total farm usage of liquid petroleum fuels — 1953, including motor and non-motor use of gasoline, diesel fuel, kerosene, L. P. gas, fuel oil, and all other liquid petroleum fuels. Figures are millions of gallons. (Below). L. P. gas' percent of total farm liquid petroleum fuels used during 1953.



Source: Production Economics Research Branch, Agricultural Research Service, and Agricultural Marketing Service, U. S. Dept. of Agriculture. Received 10/10/55; covers the year 1953.

capacity, together with development of the farm tractor as a summer load, have opened up dazzling possibilities for the space heating load; and the LPG dealers have been quick to recognize the potential. Sales of central heating units have boomed as the dealers learned to work with architects and contractors, mastered the engineering aspects of calculating the proper unit for each installation, and polished their merchandising methods.

New developments in gas-fired

cooling units promise a year-around LPG load for domestic "climate-control" which can carry the industry to still unforeseen heights.

... LPG dealers key outlets for the rural market?

From the beginning, the field of the LPG dealer has been the small town, suburban, and rural market. Originally on a side-line basis in the immediate vicinity of the plant or store, the development of uses be-

Farm Market for LPG... Lots of room for growth

yond the domestic cooking load has led dealers to stock more varied lines of appliances and equipment, to invest more in plant facilities, and to widen their service areas.

Today, the most successful LPG dealers are achieving more efficient distribution through close attention to cost control accounting, the use of modern business machines, two-way radio, materials handling equipment, and higher standards for both sales and operating personnel. The trend is to an organization that can work on a large volume and rapid turnover basis.

This can lead to establishment of the LPG dealer as the key outlet for manufacturers whose products are sold to rural and suburban consumers... supermarkets for the farming community. In a number of companies this trend has already led to a split in operations between fuel sales and sales of LPG-using equipment and appliances, with the showroom and plant facilities in different locations.

Such changes benefit the consumer in better service and lower prices, and that inevitably means more business for the LPG dealer.

... Re-emphasis on the farm market

In 1946, BP-News said "Safety is the first great goal of the LPG industry; the balanced load is next." The intervening years have seen the first goal well on the way to solution with better employee training programs, standards of installation and inspection, and knowledge of safe operating practices.

The balanced load, which requires a build-up of fuel sales during off-peak seasons, has already been solved by many operators... in some cases leading to inverse ratios. The industry therefore now has an adequate file of individual case histories to solve the balanced load on a national scale.

Since in most cases the off-peak season is during the summer months, the farm market offers the greatest

possibilities. Among these possibilities are the conversion of tractor and stationary engines, brooding, weed-burning, flame cultivation, dehydration and food processing.

A recent bulletin from the U. S. Dept. of Agriculture points up some of the possibilities for LPG in the farm market. For the year 1953, USDA reports farm consumption of 8,808 million gallons of liquid petroleum fuels including gasoline, kerosene, LPG, diesel fuel and fuel oil. Of this quantity, LPG took 3% of the 6775 million gallons used for motor fuel, and 30% of the 2033 gallons for all other purposes such as cooking, heating, brooding, dehydration, and weed burning.

In other words, the farm market used about 203 million gallons of LPG for motor fuel and 610 million gallons for all other purposes . . . or 9% of a total potential of 8808 million gallons.

The possibilities become more evident when the state breakdowns are examined. Dealers in New Mexico had achieved a 23% share for LPG of the farm motor fuel gallonage. Texas had 20% and Arizona 11%. *Thirty-eight states report 1% or less.*

In all other farm uses, LPG's share is over 80% in Mississippi, Louisiana, Oklahoma and Texas. *It is less than 10% in sixteen states.*

The dealers in the leading states would be the first to admit that they are still a long way from saturation coverage of the farm market. Yet, *if all states had met the performance of the leading state in each category, farm usage of LPG in 1953 would have jumped 1355 million gallons in internal combustion sales and 1138 million gallons in all other farm uses.*

Actual usage of 203 million gallons of LPG by farmers for motor fuel represents approximately 40% of total sales for internal combustion reported by the BuMines for 1953. Their usage of 610 million gallons for all other purposes represents 25% of total domestic and commercial LPG sales for the same period. The farm market is therefore absorbing a sizeable portion of the LPG dealer's fuel volume . . . but it is still relatively untapped, for the figures on liquid petroleum fuel sales are only a portion of the farm potential. There are still more possibilities in converting the farm users from solid fuels such as coal or wood and from



Farm uses for LPG. . . . Tractors, pumping, and flame weeding are all scheduled for sharp increases in the next few years.

electricity, for cooking, water heating and space heating.

As far as the farm market is concerned, some dealers have cashed in and others haven't. More dealers could and should re-examine their possibilities in this field. Teaming sales to the farmer for summer uses and to the domestic consumer for winter heating is a fast way to build a profit-making fuel load.

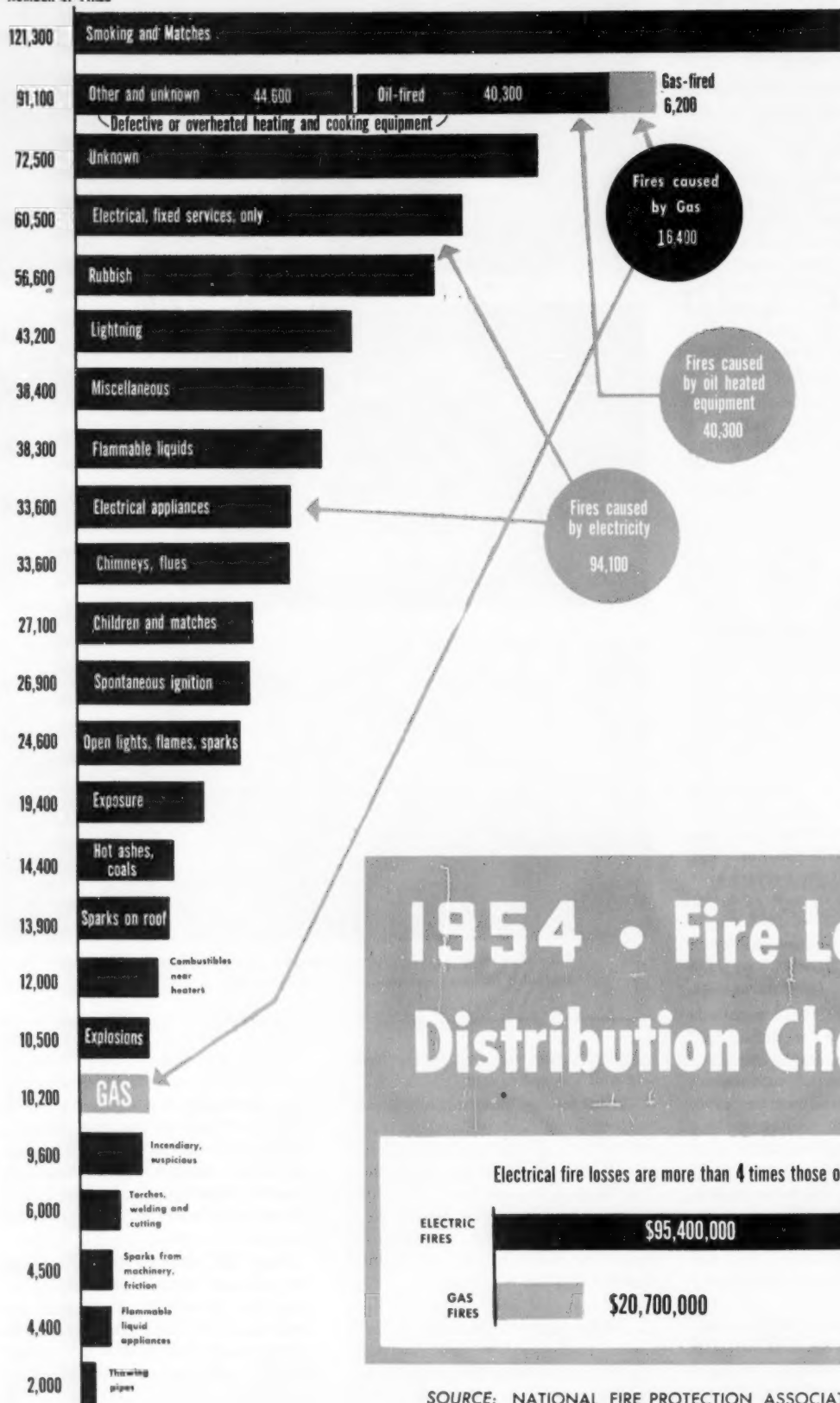
. . . Why study trends?

Industry trends afford an interesting and exciting picture of growth

and development for they represent problem-solving by individual operators. Someone had to have the idea first, and if it was successful it was adopted by others to meet a similar problem. The best ideas eventually become industry practice, to be replaced only when a better practice is found.

Your LPG industry has continued to progress because you, its operators, are interested in finding the best ways to serve the public and make money for yourselves. Keep it up . . . perhaps you, too, can start a trend! ■

NUMBER OF FIRES



1954 • Fire Loss Distribution Chart

Electrical fire losses are more than 4 times those of gas

ELECTRIC FIRES

\$95,400,000

GAS FIRES

\$20,700,000

SOURCE: NATIONAL FIRE PROTECTION ASSOCIATION

... GAS IS THE SAFEST FUEL

Safer than electricity, 4 to 1; safer than oil, 18 to 1

THIS shows up again in the National Fire Protection Association's most recent report, "Estimated U. S. Building Fire Losses by Causes, 1954," which is reported herewith.

"Safety" is one of the claims advanced by the electrical industry, and by the oil heat industry, in furtherance of their sales programs. We do not need to guess on these matters, and we do not need to allow any misleading claims. The relative frequency of fires originating from electricity, fuel oil and gas can be determined from reliable statistics which are available to all. And on the basis of those figures gas of both kinds enjoy a remarkable superiority in the avoidance of fires.

There are now approximately 48 million connections for electric service, and 36.5 million customers using gas from pipelines and LPG systems. Dividing these figures by the total number of fires reported by the NFPA as attributed to electricity and gas we find that in 1954 there was one fire per 510 electrical services, and only one fire for every 2225 gas connections. On the basis of the figures, the fire hazard is more than four times as great with electricity as with gas.

Now where does oil fit in the safety picture? The latest figures that we have seen that fit into the NFPA breakdown, and from which we can directly relate cause and effect, come from the 1950 Census of Housing (U. S. Bureau of the Census). NFPA gives us a direct comparison of fires originating from defective or overheated heating and cooking equipment. The Census of housing shows 12,936,000 installed domestic systems for heating or cooking with liquid fuels (fuel oil, kerosene, gasoline). It shows 37,167,000 home heating or cooking systems operated on utility and L. P. gas. Dividing the reported numbers of fires in those categories into the totals shows one fire for every 321 oil heating and cooking systems, and only one fire for every 5995 gas heating and cooking systems. That is a ratio of nearly 18 to 1 in favor of gas. Bear in mind that this compares the 1954 fires with the

1950 installations. We know that gas heating and cooking installations have been increasing faster than those with oil, so today's figures, if available, would show an even greater advantage in favor of gas.

Now prepare for a shock. The electrical industry has been working very hard to correct the very bad condition that has developed over the years due to the overloading of the inadequate house wiring systems of the past. Their work appears to be bearing fruit. The rate of increase, percentagewise, of fire due to causes related to wiring is slowing down in spite of the tremendous increase in the number of small electrical appliances being placed in service. When one considers the intricate web of wires within the walls of buildings, and the multiplication of small electric appliances being hung on circuits

never designed for such loads, this is a very creditable showing. The figures do not show a corresponding reduction in incidence of fires caused by gas and gas appliances. Our industry is eliminating some of its hazards, but the electrical industry, having much farther to go in making things safe for its customers, is making noticeably better progress.

Safety is still the most important responsibility of every employe in the L. P. gas industry. We must replace unsafe appliances with those that have built-in safety controls. Safety practices in making installations must be improved. Customers must be trained to avoid the hazards that they are now creating, and which are beyond the control of those who sell, install and service the equipment. Fires can be avoided if everyone does his part.

ESTIMATED DISTRIBUTION OF U. S. BUILDING FIRE LOSSES BY CAUSES — 1954*

*RELATIVE ORDER OF MAGNITUDE OF FIRE LOSSES BY CAUSES, ESTIMATED BY NATIONAL FIRE PROTECTION ASSOCIATION

| | No. of Fires | Losses |
|---|----------------|----------------------|
| Chimneys, flues — defective or overheated | 33,600 | \$24,600,000 |
| Sparks on roof | 13,900 | 9,950,000 |
| Defective or overheated heating and cooking equipment — | | |
| Oil-fired equipment | 40,300 | 32,800,000 |
| Gas-fired equipment | 6,200 | 6,750,000 |
| Other and unknown | 44,600 | 42,500,000 |
| Rubbish, ignition unknown | 56,600 | 12,500,000 |
| Combustibles near heaters | 12,000 | 9,900,000 |
| Open lights, flames, sparks | 24,600 | 17,350,000 |
| Hot ashes, coals | 14,400 | 12,040,000 |
| Smoking and matches | 121,300 | 65,400,000 |
| Children and matches | 27,100 | 13,900,000 |
| Electrical, fixed services, fires due to misuse, or faulty wiring, equipment | 60,500 | 77,400,000 |
| Electrical, power consuming appliances | 33,600 | 18,000,000 |
| Flammable liquids, misuse of including vapor explosions, grease, tar, etc. | 38,300 | 34,700,000 |
| Flammable liquid appliances, including lamps, blow torches, salamanders, etc. | 4,400 | 2,460,000 |
| Torches, welding and cutting | 6,000 | 11,900,000 |
| Gas and appliances, including gas explosions | 10,200 | 13,950,000 |
| Spontaneous ignition | 26,900 | 44,000,000 |
| Lightning | 43,200 | 43,600,000 |
| Thawing pipes | 2,000 | 2,400,000 |
| Sparks from machinery, friction | 4,500 | 8,200,000 |
| Incendiary, suspicious | 9,600 | 25,600,000 |
| Miscellaneous | 38,400 | 20,600,000 |
| Unknown | 72,500 | 268,900,000 |
| Explosions, miscellaneous and unclassified | 10,500 | 23,050,000 |
| Exposure | 19,400 | 33,000,000 |
| TOTALS | 774,600 | \$875,450,000 |

Heroic achievements in Operation Cue feeding demonstration revealed

Despite disrupting postponements and difficulties in liaison and communications, LPG's dependability helped feeding teams serve hundreds of observers on the day the A-bomb was set off in the Nevada desert.

HOT coffee by air from Chicago, hot baked beans by overland freight from Los Angeles!

Put together those two ingredients from far distant points and you have the basic elements on the menu for "Operation Cue." You also have one good reason why the mass feeding demonstration, carried on at the atomic bomb test site in the blustery Nevada desert last spring, was one of the most amazing and difficult challenges ever met by the food handling industry.

There were many other conditions that contributed to making the demonstration the spectacular and difficult job it was. It was also a challenge for LPG, the fuel that was chosen to heat the meals in the field. The feat performed by LPG is already fairly well documented in reports circulated within the industry. But now the fuel's accomplishments are substantiated in a recently released bulletin titled "Report on Feeding Demonstration, Operation Cue," prepared by the Department of Health, Education and Welfare for the Federal Civil Defense Administration.

The trials, heartbreaks, and emergencies encountered by the feeding teams are described at length in the report. The unforeseen difficulties posed by the repeated postponements were the most critical, the booklet declares.

"What was the most difficult and complicating aspect of the entire program was the long delay in setting off the explosion of the atomic de-

vice, on which all of this planning had been premised." As a result, the known factors of distance, climate, and overloaded communications facilities took on new and significant proportions in carrying out the feeding operation. Rolls and doughnuts had to be purchased not once, as planned, but several times. Other supply items, such as paper cups, spoons, coffee, and certain staples, had to be replenished. Even the eggs, which had been kept under refrigeration, had to be replaced.

"Transportation of these items to Camp Mercury had to be provided by the feeding team. The demonstration included the movement of hot coffee by air from Chicago and of baked beans by overland freight and CAP aircraft from Los Angeles. These events had to be programmed on a tight schedule. Each postponement and each rescheduling of the shot necessitated communications with both Chicago and Los Angeles. Except for the stepped-up cooperation of the organizations participating in this part of the program, which included the use of their teletype facilities and the making available of a representative in Las Vegas to receive and move the coffee and beans to the test site, this phase of the feeding demonstration would have had to be cancelled because of these repeated postponements."

The problems that had to be overcome did not all stem from the post-

ponements. The distance from sources of supply was a real headache, as indicated, as was the shortage of communications facilities. But the extreme climatic changes posed special problems of their own. This fact was particularly evident during the "dry run" which had been planned to test the feeding arrangements.

"As it turned out, this dry run was a real test of both the team and its equipment," the report states. "In winds of 50 to 60 miles per hour velocity, the breakfast and part of the lunch menu were prepared and served to some 150 field force participants. The feeding team did the entire job—even dug its own post holes and set up a substantial canvas windbreak which stood up under the heavy wind conditions.

"Much was learned from this experience. While the original program was not changed, some of the methods for carrying it out were revamped and revised. For example, it was decided that the eggs would be shelled in Camp Mercury and kept in tightly sealed stock pots, which would be maintained under refrigeration at all times. Frying of bacon on the grill proved to be a slow process under the wind and altitude conditions. It was decided therefore to precook the bacon, maintain it under refrigeration, and mix it with the eggs just prior to cooking. These changes contributed materially to increase the

For a diagram of the set-up used for the mass feeding turn to page 70. ➡



What you do

Right Now is mighty important

Like making every shot count — what you do *right now* in business can be mighty important. For example, *right now* is the time to start planning to meet the added financial load of metered gas . . . new tougher competition, and long-term tank leasing programs. That's why you will want all the facts on Beaird's new "PROFIT PLAN".

Here is realistic long-term financing . . . a systematic business growth program that lets your present volume finance your future. You can pick the plan you want . . . choose your own goals . . . decide for yourself how big your business must be to provide the income and security you want three, five or even ten years ahead.

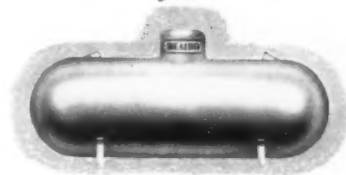
And you will get the Beaird *plus* too . . . hard-hitting advertising and merchandising support . . . a stocking point program that puts the system you need where you can get it in a hurry . . . and the finest LP-Gas system that money can buy — a quality-built product that is your best investment for the years ahead.

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Now ... 1,000 BONUS GALLONS EVERY TRIP

IN STOCK
IMMEDIATE
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... WITH BEAIRD *Payliner* TRANSPORTS

You can actually count on a Beaird Payliner single-tank transport to do your job faster and for less money. With bigger legal payloads, one Payliner can mean an extra \$4,000 profit, in a single year's operation. And low original cost plus long term financing starts you saving the day you buy.

**EXTRA CAPACITY
SAVES YOU TIME**

You haul bigger loads on a time-saving schedule and save money doing it. Beaird Payliners fill quickly and have front and rear outlets to speed up unloading. Their low center of gravity and excellent balance makes them tops in maneuverability...reduces wear and tear on operator and equipment.

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SAVES YOU MONEY**

Structurally designed to eliminate excess dead weight, Beaird Payliner tanks are formed from high tensile steel,

100% x-ray of seams and stress relieving assures maximum strength and safety. The entire unit is fabricated according to 1952 ASME code for 250# or 265# working pressure.

**PRODUCT ENGINEERED SIZES
FOR IMMEDIATE DELIVERY**

Single-tank Payliners: 7,200 w.g. capacity for Propane or Butane — 6,165 w.g. capacity for Anhydrous Ammonia.

Twin-tank Payliners: 5,600 or 6,000 w.g. capacity for Propane or Butane — 5,380 w.g. capacity for Anhydrous Ammonia. Other sizes to meet special operating requirements are available on custom order.

Buy full load capacity — Write today for a quotation on a Beaird Payliner transport sized "just right" to fit your hauling needs and financed to fit your pocket.

THE J. B. BEAIRD COMPANY, INC.



L-P Gas



Anhydrous Ammonia



Pressure Bulk Storage



Transports



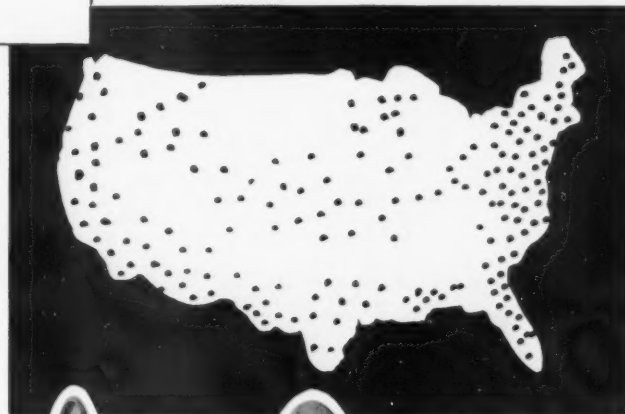
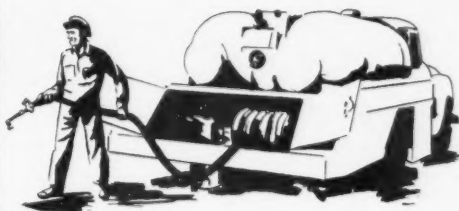
Filling Station

BEAIRD

Shreveport, Louisiana
Stockton, California

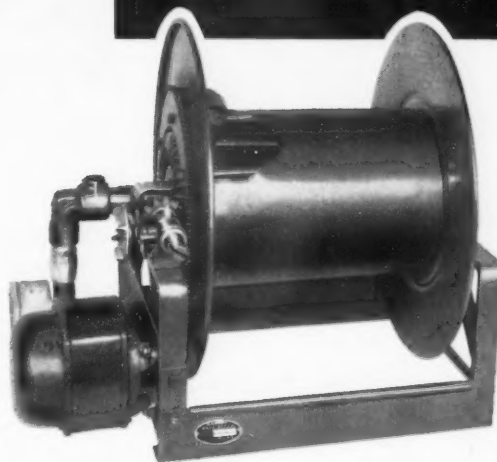


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coast to coast, rugged,
dependable Hannay
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pay for themselves



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When you order your next truck, or modernize your present one, be sure you *specify* and *get* Hannay. You'll find it profitable.



Send for free catalog with complete specifications.

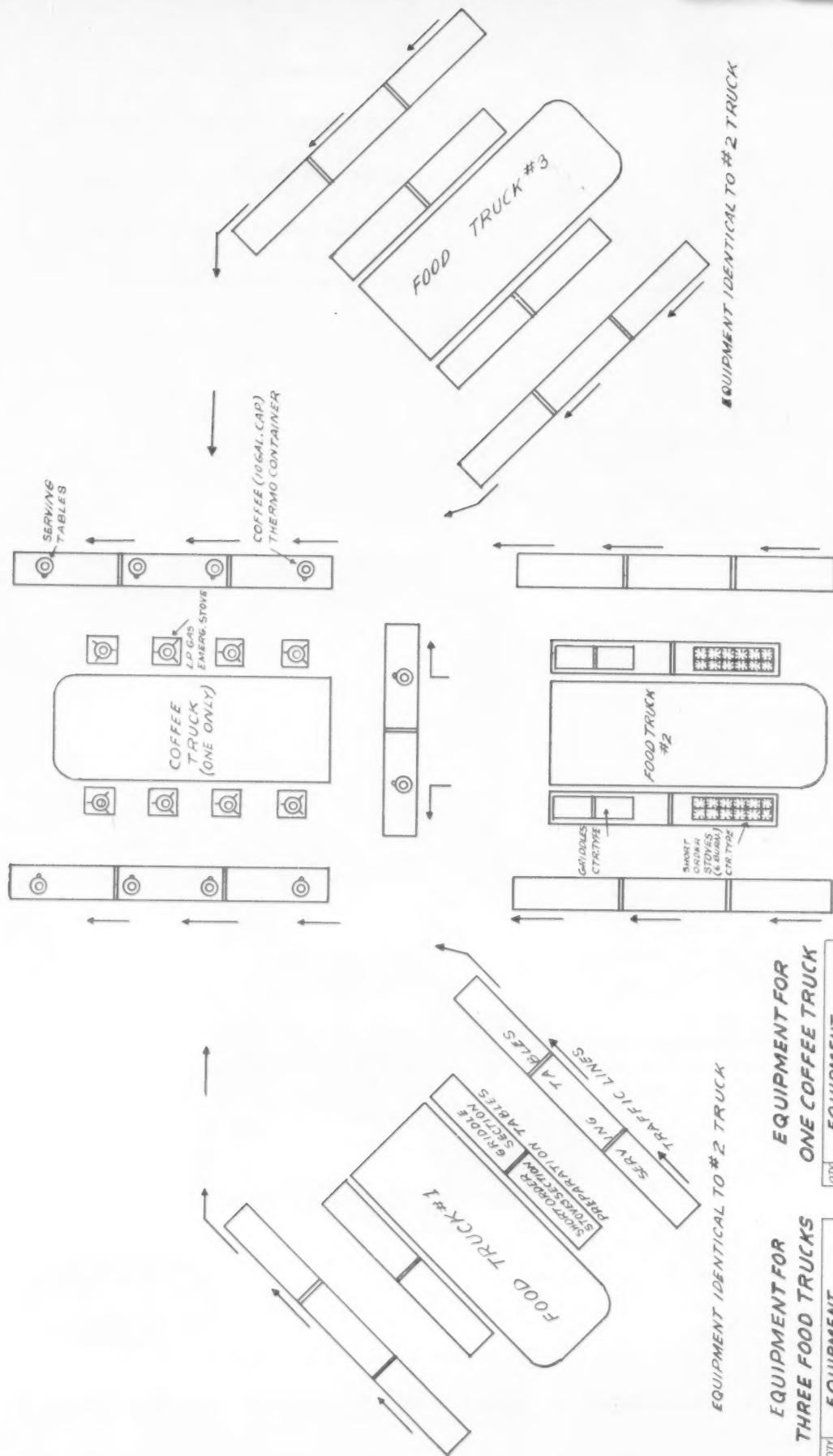
... Greatest Name in Hose Reels

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CLIFFORD B. HANNAY & SON, INC., 326 WEST ST., WESTERLO, N.Y.

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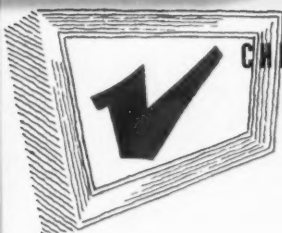
DETAILS OF TYPICAL
EQUIPMENT FOR FOOD TRUCKS

**EQUIPMENT FOR
ONE COFFEE TRUCK**

| QTY | EQUIPMENT |
|-----|--------------------------------|
| 8 | SERVING TABLES (FOLDING) |
| 10 | COFFEE THERMO CONT. |
| 8 | ROUND LP GAS STOVES (4 BURNER) |

**EQUIPMENT FOR
THREE FOOD TRUCKS**

| QTY | EQUIPMENT |
|-----|--------------------------|
| 18 | SERVING TABLES (FOLDING) |
| 12 | PREPARATION TABLES " |
| 12 | SHORT ORDER STOVES |
| 12 | GRIDDLES |



CHECK THESE EXCLUSIVE

MASTER FEATURES

ON "The Time Saver"

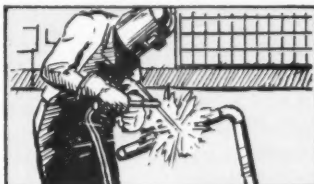
Patent Pending



YOUR CHOICE OF CLOSED END . . .
(Illustrated above)

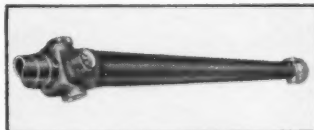
WELDED CONNECTIONS STOP LEAKS

All pipe connections are welded, where it is feasible. This assures trouble-free service and a greater savings to you!



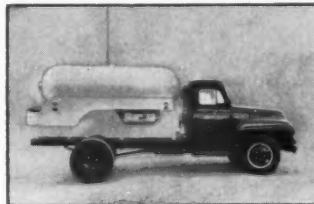
TUBULAR SHAFT PUMP DRIVE

The pump driving equipment consists of the best joints money can buy and tubular driving shafts — the same design which propels the truck. A lifetime of trouble-free service.



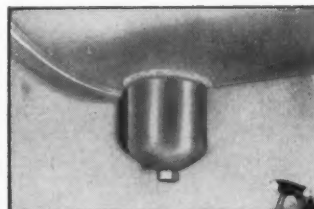
ONLY 60 MINUTES TO CHANGE TRUCKS

Merely disconnect power takeoff and unscrew the mounting bolts. Entire unit is ready to be moved. There isn't a single pipe fitting to change. The elimination of a big plumbing job eliminates the cause of leaks and trouble.



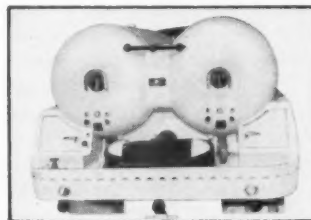
TANKS PUMP DRY

. . . with the exception of a pint, which remains in the sump. This sump catches all sediment and eliminates the need of a strainer in the suction line, which slows the flow. The sump is drained periodically to remove the sediment. The tank outlet is at the rear, where there is a 2" line inside that takes suction from the sump at the front.



When operating in country where there is ice and snow, the enclosed type is recommended. There is ample room for meter and hose reels plus extra space for other uses. The rear compartment opens up with the doors entirely out of the way to give ample working space. One latch locks all three doors.

. . . OR OPEN END



If you are in a section where there is not much ice and snow, the open end type rear is recommended. The meter is enclosed and there is a large tool box on the opposite side plus ample room for the hose in the center. If you do not use power hose reels, the rear compartment is designed so you can wrap the filter hose outside and the vapor hose inside of the rack. Either hose can be used separately.

SPRAY NOZZLE FOR FASTER FILLING

Refrigerating principle lowers the pressure and makes the tank easier to fill.

REAR MOUNTED PUMP STOPS LEAKS

When the pump is mounted on the truck chassis, the twisting and careening of the truck is murder on pipe connections. Master Engineers have designed a leak-proof truck tank with pump and pipe fittings, mounted as a single unit, on the rear of the tank.

STREAMLINED BODY

The body has been streamlined to beautify its appearance. It is finished with a hot enamel process for high lustre and greater durability.

NO PLUMBING INSTALLATION

The Time Saver comes completely installed on the truck of your choice. However, The Time Saver tank unit can be furnished for a "Do It Yourself" installation. There is no complicated plumbing job, for the entire pumping unit is mounted on the rear of the tank.



Operation Cue feeding . . . It took only 25 minutes to serve breakfast to 1200 — LPG made this possible

speed of the breakfast preparation.

"All the equipment except the stoves functioned effectively in this test. Of the three types of heat transfer units, only the gas utility stoves functioned efficiently in the severe winds. While it was unlikely that such winds would be present during an actual shot, the fuel representative on the committee had 14 similar stoves air expressed from the East Coast the same day.

"This was in keeping with the spirit of the group throughout the exercise: that the feeding demonstration had to be effectively performed whatever the operating conditions encountered or the personal inconvenience, cost, or sacrifice it entailed."

It was apparent from the report that not only did the LPG representatives do their part well, but the fuel itself matched this performance.

"A gas stove removed from a kitchen of one of the damaged houses was set up in the feeding area," said the report. "This stove was in operation in less than 10 minutes, having been converted to L. P. gas."

In explaining the thinking behind the selection of both the fuel and the equipment by the National Advisory Committee on Emergency Feeding, the report said:

"It was natural for the committee to decide on LPG as the major fuel to be used in the demonstration. It was easily transportable in cylinders of from 20 to 100 lb and was safe in the hands of competent personnel. It could also be used to operate stoves from the damaged test houses and thereby demonstrate its unique contribution in emergency feeding — kitchens still intact can be made operable even though normal gas utilities may have been disrupted.

"Its use in the feeding demonstration was a fitting companion piece to one of the technical test projects in this AEC series—a typical L. P. gas bulk plant, usually found on the outskirts of our cities and beyond, was set up broadside to the shot tower on the 4700-ft line to test its resistance to blast and thermal effects."

As for equipment, it was reported that "the committee ruled out the use of ovens in the exercise as being too elaborate and not of a type that could

be easily moved on and off the trucks. The feeding plan agreed upon was based on the use of improvised, mobile feeding trucks capable of storing and transporting all of the equipment and supplies necessary for preparing and serving food in the test area.

"Three trucks would be equipped for food service, and the fourth for coffee service. All carried four 100-lb tanks of L. P. gas. Equipment would be so arranged on the food trucks that a feeding station could be set up on each side—six stations in all. Each food truck would carry six 4-burner gas stoves, four counter-type griddles, four utility stoves, 10 8-ft folding tables, and sufficient food supplies, paper service, cooking and serving utensils to feed 600 to 800 people.

"The coffee truck would carry eight folding tables, 10 40-gal. stock pots, 10 10-gal. thermo-liquid urns, four coffee walkies, eight round utility gas stoves, and sufficient supplies of coffee, powdered cream, sugar, paper cups, napkins, and spoons to serve several thousand persons. There were two additional pieces of motive equipment — a refrigerated truck and a covered truck which carried non-purchasable food supplies, thermal urns and other items."

In addition to the truck-mounted equipment, improvised cooking arrangements were used in preparing the luncheon. The gas stove taken from the damaged house was one improvisation. Another was a charcoal fire set in a shallow trench, over which 20-lb sirloin butts of beef were roasted. The beef was suspended by wire in 110-lb shortening cans. Frozen fish, double-wrapped in aluminum foil, was prepared on grills built from the rubble of the damaged structures.

Thus, in brief, the breakfast served before the shot was planned to utilize more modern methods of cookery, while after the shot some emergency means were employed such as it might be necessary to resort to after an actual bombing. Although these were the only actual demonstration meals scheduled, the dry run and a second breakfast were also staged, and coffee and snacks were served on seven different occasions. The committee's "conservative" estimate of the amount of coffee consumed

was 55,000 cups. The actual test breakfast was served to 1200 on the morning of the shot; 1100 luncheons were served on the following day.

Did the test accomplish the objectives set up for it? In the view of the DHEW reporter it did. The goal of the committee appeared to be to walk a tight line between planning and improvisation. "It was the majority view of the committee," says the report, "that the entire operation was one of improvisation and that further innovations would be unnecessarily complicated. The program finally approved providing for the roasting of beef in shortening cans over an open fire. No attempt would be made to construct brick ovens, although grills might be set up using rubble from the test houses. The thinking of the committee was that overemphasis on this phase of the demonstration might give rise to the false impression that emergency feeding as conceived under modern attack assumptions could be accomplished with such methods."

The souvenir menus distributed to diners sounded the keynote with the statement that "The menus chosen for this demonstration have not been selected to give any preview of 'hardship' conditions. On the contrary, the committee hopes the meals will be pleasant and tasty—however, as in an emergency the importance of simple, nourishing, health-giving foods is accented."

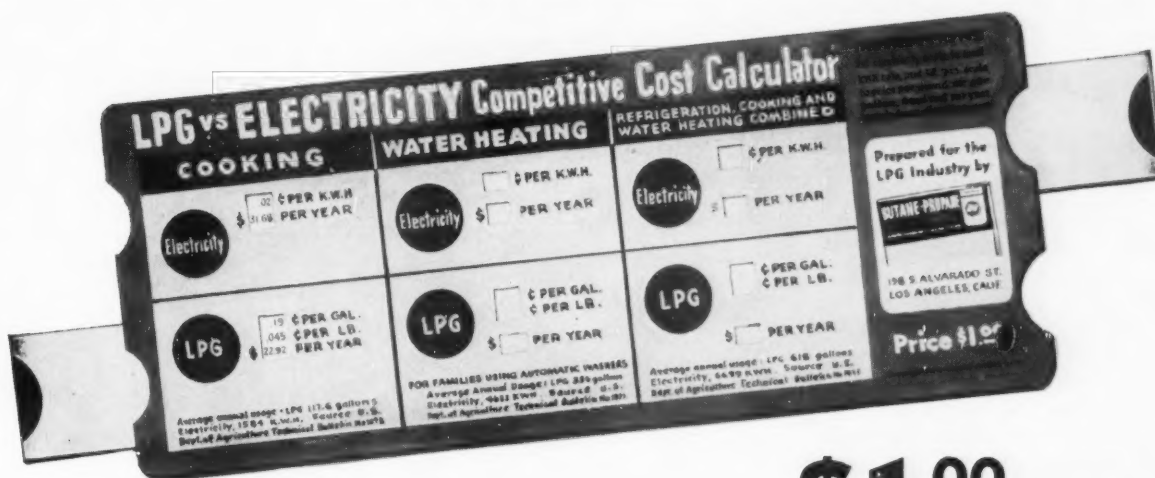
One of the most important goals to be demonstrated at the breakfast feeding was speed. The report said:

"On the morning of the initial postponement preparation required 30 minutes, and on the morning of the actual shot 25 minutes. This represents the time which elapsed from the undoing of the first knot on the tarpaulin covering the food trucks to the time when all of the food stations (only four of the six activated) were able to begin continuous serving of breakfast; some stations were ready to begin a few minutes earlier. It should be pointed out that, before food preparation could begin, stoves and equipment had to be removed from the trucks, placed on tables and connections made to the gas cylinders, which remained on the trucks. The serving of both the lunch and the breakfast was completed in less than 50 minutes including the serving of seconds, thirds and probably even fourths to a few." ■

Selling against electrical competition?

**You'll close more appliance sales
when you use this handy**

COMPETITIVE COST CALCULATOR



Now... with this authoritative, convincing sales tool, you can prove to your prospects *quickly, easily, and simply* that LPG costs less than electricity for cooking and water heating. Money talks with most people, so *dramatize the savings* with a Competitive Cost Calculator.

- Compares the average annual cost of operating LPG versus electrical appliances, using your own local rates.
- Proves to your customers' satisfaction that it's less expensive to cook and heat water with LPG than with electricity.
- It's authoritative! Average annual usage figures for both LPG and electricity are taken from Technical Bulletin 1073 prepared by the U. S. Department of Agriculture.
- It will last for years. Made from durable plastic-laminated board.

\$1.00 each

Orders of 50 to 99 — 80¢ ea.

Orders of 100 or more — 70¢ ea.

LPG OPERATORS —

The Competitive Cost Calculator builds fuel sales as it builds appliance sales. Hundreds of LPG appliance salesmen are using the Calculator to add authority to their sales presentations. Be sure each of your salesmen has one with him on every call.

BUTANE-PROPANE News, 198 S. Alvarado St., Los Angeles 57

Here's my remittance of \$..... for which please send me
..... Competitive Cost Calculators. (In Calif. add 3% sales tax)

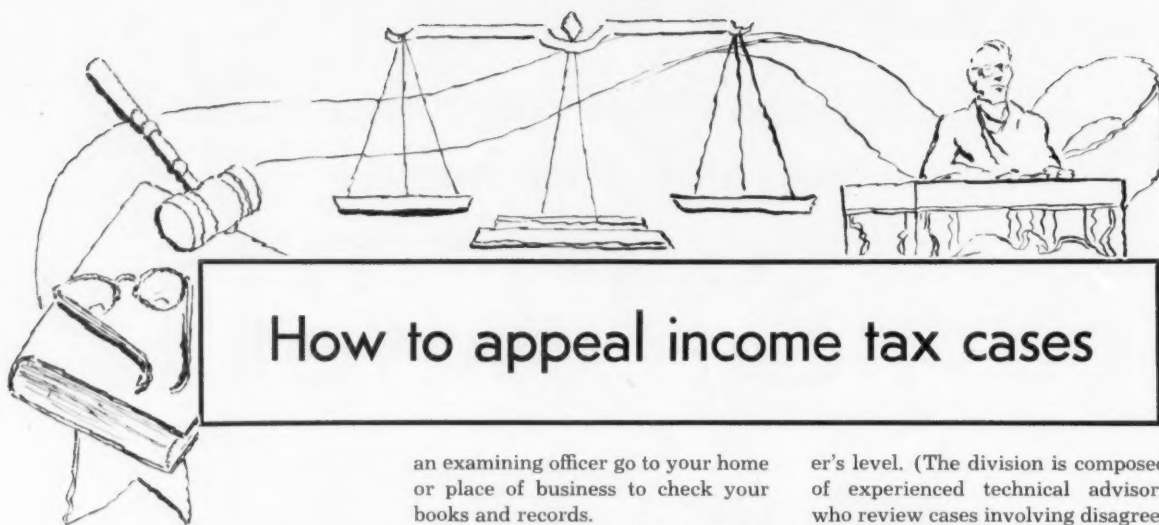
NAME.....

COMPANY.....

MAIL ADDRESS.....

CITY..... ZONE..... STATE.....

The supply is limited, so
ORDER TODAY!



How to appeal income tax cases

A TAX deficiency is not to be confused with errors in arithmetic. If an error in arithmetic involves an underpayment, it is merely called to your attention and your remittance awaited. If it involves an overpayment, a check for the difference is mailed you. Neither type of adjustment is subject to review by a court.

Questions concerning the correctness of a return arise out of the interpretation of the tax law and the IRS regulations, and from the facts in the particular case. Controversies over the application of the regulations to a businessman's transactions often end up in the courts for settlement.

On preliminary examination the IRS may determine that your taxable income has not been correctly computed, suggesting a possible tax deficiency. This deficiency may involve either the type or the amount of deductions claimed. You may have taken credits or deductions to which you are not entitled under the income tax law and regulations. Or you may have claimed too much. These errors may lead to either an office or field audit of your return (*step 1* on the chart). In this event, you will be asked to submit additional evidence in the form of receipts, canceled checks, bills of sale, and so on to substantiate the amounts claimed and to justify them as proper deductions.

An office audit may be conducted by correspondence or by having you appear in person with your records. A field audit may be made by having

an examining officer go to your home or place of business to check your books and records.

After the IRS agents has completed the examination of your return, he will discuss with you his findings concerning a proposed deficiency or overassessment. If you agree with his findings, you have an opportunity to execute an appropriate agreement form. If you do not agree, you are furnished a statement of the proposed tax adjustment and are told of your right to an informal conference to be conducted by an official of the district director's office. At the conference you may discuss the issues orally and informally. If you agree with the decision reached at this meeting, you execute the appropriate agreement form. A report stating the conference conclusions is then prepared and sent for approval to the audit division reviewers in the office of the district director. If it is approved, a copy of the report is mailed to you.

If you do not agree with the conference decision, you receive a copy of the report, together with a "30-day letter" (*step 3*). This letter explains the determination of the deficiency or overassessment, and affords you 30 days to decide upon one of three courses of action:

- You can execute the IRS agreement form and thereby close the case by accepting the agency's determination.
- You can file a formal protest, in triplicate, under oath, with the district director and request that your case be transferred to the appellate division (*steps 3A and 3B*), which is the appeal agency in the IRS functioning at the regional commission-

er's level. (The division is composed of experienced technical advisors who review cases involving disagreement between taxpayers and the office of the district director.)

- You can fail to respond within the 30-day period, and wait for a "statutory notice" (90-day letter) to be issued to you. Within this 90-day period an appeal may be taken to the Tax Court of the United States (*steps 4 and 4A*). (The court is an independent agency having no connection with the IRS or the Treasury Department.)

Formal Protest

If you file a formal protest during the 30-day period, you should do so only if you believe the examining officer has not properly applied the law and regulations in your case. Before taking this step, you may wish to consult with your attorney or accountant if the circumstances are involved or complex. Should you decide to have either of these persons represent you in the matter, you must give him a power of attorney, authorizing him to represent you. You should be certain that your attorney or accountant has been admitted to practice before the Treasury Department. Your protest is reviewed in the office of the district director and, if it meets with the requirements, is recommended for a hearing before the appellate division (*step 3B*).

IRS Appellate Procedure and the Tax Court

The appellate division acts on cases in which the taxpayers have filed formal protests (*step 3A*), and also in

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CYLINDERS
ARE NOW
AVAILABLE
IN SIZES OF
20 TO 420
POUNDS

you can't buy better!

WIRE, WRITE OR PHONE TODAY

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4801 BELLEVUE AVE.

DETROIT 7, MICH.

PHONE WALNUT 5-3430

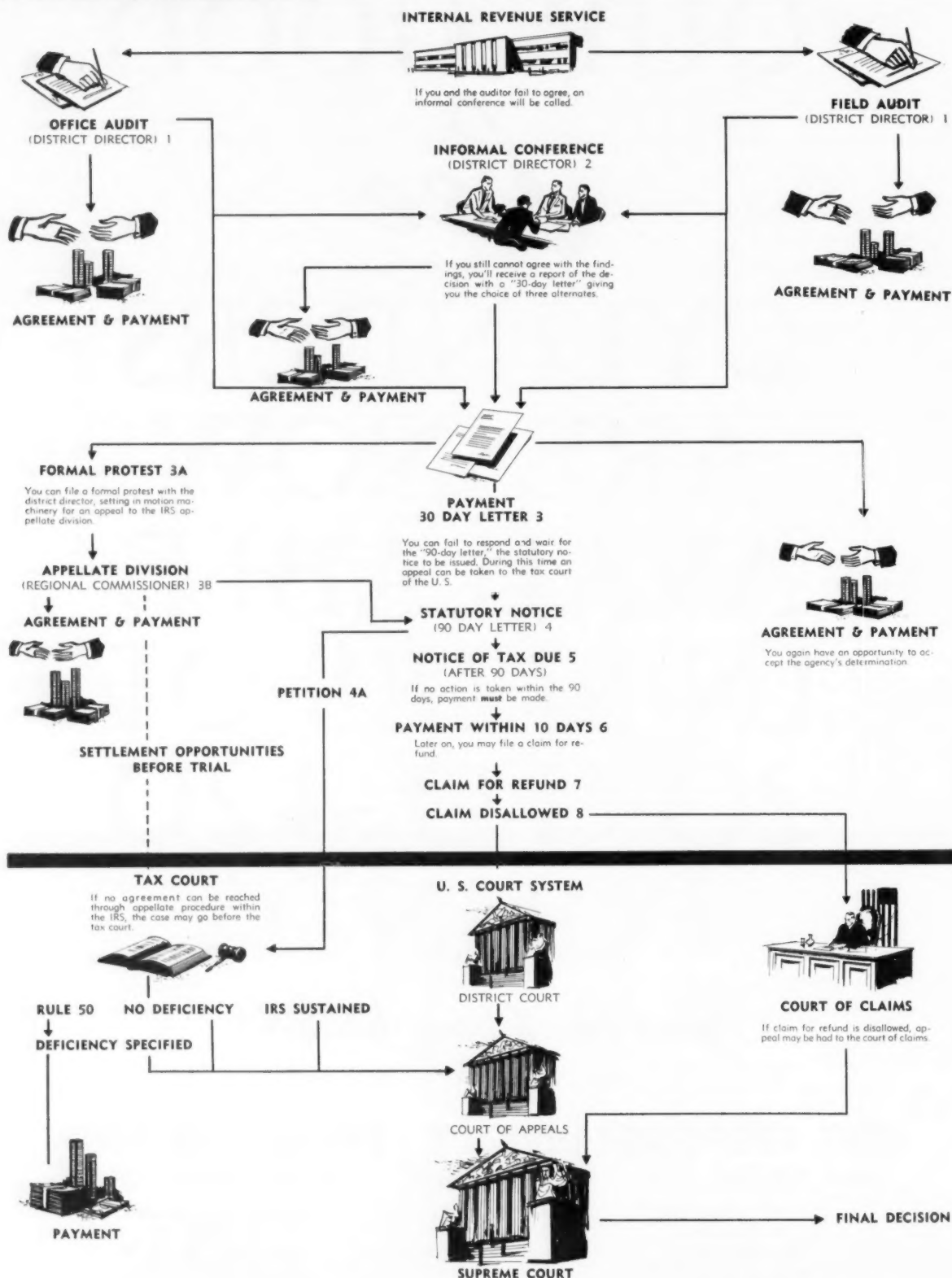
N. & R. SALES CORP.
36 Parkway
Goshen, N. Y.
Phone Goshen 656

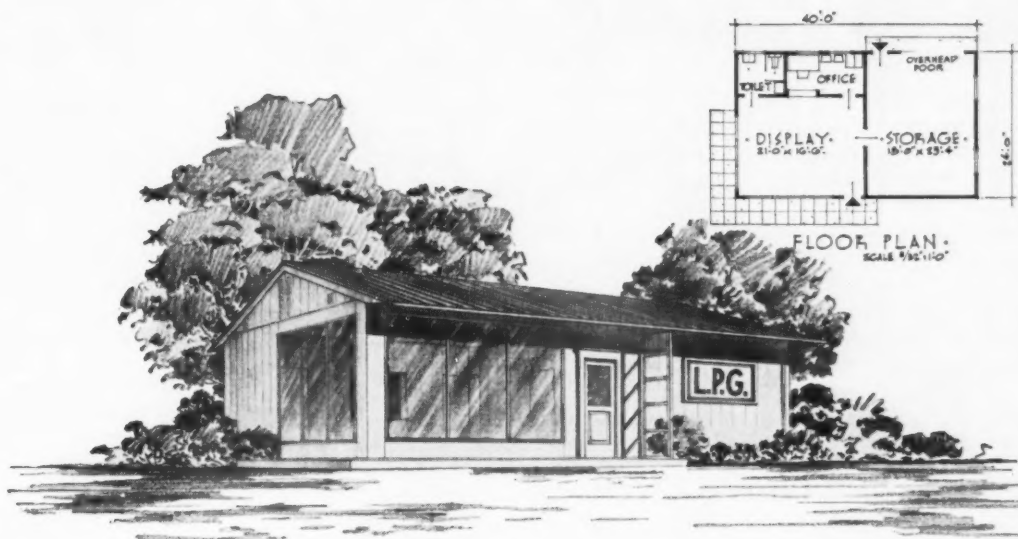
DEAN WAGONER, Jr.
Box 2252
Greensboro, N. C.
Phone 5-7623

EXPORT DEPARTMENT
55 W. 42nd St.
New York 18, N. Y.
Phone CH. 4-3088

INCOME TAX APPEAL PROCEDURE

Tax deficiency? If your tax payment falls short of what's due, you face either an office or a field audit.





From sketch to LPG salesroom...**In Days!**

This is one architect's idea of how an Armco Steel Building makes a typical LPG sales and storage room. You can have one just like this—or one of a thousand variations—erected and ready for occupancy in a matter of days!

Your Armco Building is shipped promptly. Then you can start counting the hours until your structure is completely erected and ready to occupy. Work goes fast because erection is a matter of fitting precision-made metal panels together. No special assembly skill required.

Armco Buildings may be extended or completely dismantled and moved to new sites without loss of material. Structures have smooth, attractive exterior walls, are fire-resistant, wind- and weather-tight.

In cost, Armco Buildings are competitive with all other types of construction, and often are much lower. Write us for suggested building sizes and designs based on your LPG building needs. Armco Drainage & Metal Products, Inc., 3256 Curtis St., Middletown, Ohio. Subsidiary of Armco Steel Corporation.

ARMCO STEEL BUILDINGS



Tax Cases...A closing agreement precludes subsequent claim or suit for refund

some cases where they have petitioned the tax court after receiving 90-day letters (*step 4A*). In the first instance a case is described as "non-docketed" (not filed with the tax court) and the second as "docketed" (when he has petitioned the tax court).

Non-docketed cases. The appellate division receives your file and protest from the district director and arranges for an informal conference where ordinarily no stenographic record is made.

You may appear at the conference with or without representation by attorneys or accountants, and you may bring such witnesses as you desire to assist in establishing the facts. If, however, additional statements of fact are to be added to the record, you are required to have them reduced to writing and submitted in the form of affidavits. If new evidence is introduced, it will be returned to the district director for verification. After full discussion at the conference, you are given an opportunity to submit a proposal for disposition of the case, which will be given consideration.

When no mutually acceptable basis for settlement can be reached, a statutory notice (90-day letter) stating the reasons for the finding of the deficiency will be issued to you (together with the customary IRS agreement form). This notice will give you 90 days in which to agree to the IRS determination or petition the tax court of the United States for a redetermination of the deficiency. This court is your final recourse for appeal prior to the payment of the deficiency. The tax will not be collected during the 90-day period of the statutory notice except in unusual cases when the Government believes that its interests would be endangered by waiting or when bankruptcy proceedings are involved.

Docketed cases. Even after a case is docketed in the tax court, appellate division procedure provides further settlement opportunities before trial. If the case is one which already

had a hearing before the appellate division but in which no agreement was reached, the businessman may initiate negotiations with the IRS which may make a tax court trial unnecessary. Or agreement may be reached when the IRS and the businessman's attorneys meet for the purpose of stipulating facts for trial purposes.

If the case is one that the appellate division has not considered (when the taxpayer skipped *steps 3A* and *3B*), the petitioner may be invited by the appellate division to discuss settlement possibilities in a like manner. In either event, if a settlement is reached, the case will be closed in that manner. If rejected, negotiations may be reopened, or the case may go to trial before the tax court.

Procedure to Follow After the 90-Day Period

Let us say that you have received a 30-day letter, as described earlier, and that:

- (a) you have appealed unsuccessfully to the appellate division, but do not wish to petition the tax court for a trial, or
- (b) you do not wish to take the matter either to the appellate division or to the tax court.

You then have another alternative. You await the 90-day letter. During this period you take no action and at the end of the 90 days you receive a notice of tax due (*step 5*) together with interest at the rate of 6% a year from the filing date of your return to the date the deficiency was assessed. This notice gives you 10 days in which to pay the deficiency. At this point you have no choice but to pay the tax.

Later on, however, if you believe that you were in error in paying the deficiency, you may file a claim with IRS for refund (*step 7*). This can be done within two years from the time the tax was paid or three years from the filing date of the return, whichever is later, provided you have not entered into a "closing agreement" with the IRS. (A closing agreement is a formal legal document, which, on

the basis of facts presented, precludes subsequent claim or suit for refund.) If your claim for refund is disallowed by IRS, you may file suit against the district director of internal revenue or the United States in the United States District Court, or against the United States in the court of claims, for recovery of the tax paid. Suit may be filed after a period of six months from the date the IRS mailed to you claim, but no later than two years from the date the IRS mailed to you notice of disallowance of the claim.

United States Court System

As outlined above, there are various avenues through which you can take your case to the United States court system. Before paying the tax you may petition the tax court, or you may pay the deficiency and claim refund (*steps 5* through *8*). If the claim is disallowed, you may sue for refund of the tax, regardless of the amount involved, in a United States District Court and thereby obtain a jury trial, or you may take your case to the court of claims.

Tax Court of the United States. If you have followed the procedure shown on the left side of the chart, you petition the Tax Court of the United States. Your petition must be filed within the 90-day period stated in your deficiency notice. The hearing, if granted, will be held in the city of your election.

A copy of your petition to the tax court will be served on the Commissioner of Internal Revenue, who has 60 days in which to file an answer. If the commissioner's answer contains nothing but an admission or denial of the facts stated in your petition, you need not reply, but if he raises new issues you have 45 days after the mailing of his answer in which to admit or deny the allegations. If you fail to reply adequately, the court may grant a motion by the commissioner for a judgment in accordance with his claims.

Before a tax court hearing occurs, you may have another conference with IRS officials to try to arrive at a settlement without trial (as discussed above under *Docketed Cases*). If the hearing is held, remember that the burden is on the petitioner to disprove any findings in the 90-day letter.

After the hearing is over, you may

Fork Lift fueling problems?



Contact Corken's or their Agents



The New Corken Coro-flo is one answer to your fueling requirements. It is the finest cylinder filling and motor fueling pump ever built.

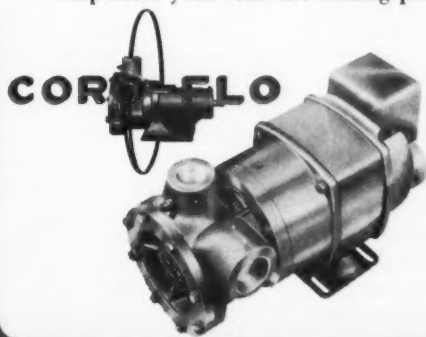
The rugged ductile iron construction, split spiral suction, double safety test, leak proof mechanical seal and simplicity of operation again show the industry why more gas operators are asking for the new Corken Coro-flo's.

A variety of models, all with high differential pressure and maximum G P M are available from stock through Corken's or their distributors.

- ✓ **80 lbs. differential with Coro-flo model C-10 $\frac{3}{4}$ HP pump.**
(Available in either Close-Coupled or Frame models)
- ✓ **100 lbs. differential with Coro-flo model C-12 $1\frac{1}{2}$ HP pump.**
(Available in either Close-Coupled or Frame models)
- ✓ **130 lbs. differential with Coro-flo model C-14 3 HP pump.**
(Available in either Close-Coupled or Frame models)

CLOSE-COUPLED MODELS ALL INCLUDE EXPLOSION PROOF MOTORS.

Contact Corken's or our distributors and let us show you how the new Coro-flo can help solve your fork lift fueling problems.



CORKEN'S

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TEL. FOrest 5-5517

EASTERN OFFICE

935 MADISON AVENUE

PLAINFIELD, NEW JERSEY

TEL. PL. 7-1305

be required to prepare and file a brief containing arguments and citations of similar cases in support of your contention. The tax court may approve the finding of a deficiency, or it may conclude that there is none or that there is an overpayment. Or, it may give the familiar ruling: "Decision will be entered under Rule 50." This means that the tax is to be recomputed. Each side may file his proposed computation for consideration of the court. But if only one party does so, the court will accept that recomputation. If the tax court rules against you, and you wish to appeal to the court of appeals, you must file a bond with the tax court to prevent assessment of the deficiency. Otherwise, the tax will be assessed at once, and collection will be made in due course.

Court of Appeals. Within three months after a tax court decision you may file a petition with the Court of Appeals for the circuit where you made your return, or if you made no return, with the court of appeals for the District of Columbia. If an unfavorable decision has been rendered on your case by a U. S. district court, you similarly may resort to the court of appeals.

If you desire to appeal from a decision of a Court of Appeals or the Court of Claims, a petition for *writ of certiorari* (call up of records of the lower court) must be filed with the Supreme Court of the United States within 90 days after the entry of the judgment or decree. The Supreme Court may, for good cause, allow an additional time not exceeding 60 days. However, your chances of having your case reviewed by the Supreme Court hinge largely on whether the decisions of the lower courts bearing on your case disagree or whether the questions arising in your suit affect a large number of individuals. The decision handed down by the Supreme Court is, of course, final.

Further information on this subject may be found in the chapter on "Income Tax Audits and Appeals," of *Your Federal Income Tax*, IRS Publication No. 17. This booklet may be purchased from the Superintendent of Documents, Washington 25, D. C., for 25 cents. ■

Adapted from "Management Aids for Small Manufacturers," published by the Small Business Administration, Washington, D. C.

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It's profitable to put the local touch in your advertising



• Here's the 'local touch' in action. Mr. and Mrs. Cleon Brown, Richland (Ind.) LPG dealers, took their share of the spotlight as participants in the centennial county fair last year. Regaled in costumes typical of the dress of the mid-1800's, they rode an ancient car in the parade and awarded a blanket emblazoned with their firm name to the winner of the feature horserace.

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THROUGHOUT the country, many gas dealers are finding that it pays to cash in on the local touch to advertising. These progressive folks are discovering that the local touch to advertising gives every dollar more selling power. It is making additional friends, obtaining new customers, retaining the old.

Professional advertising people and the old-time advertisers are aware that there is only one quick way to sell their products. That is to sell through the customer's existing interests. To face the brutal truth, the customer is not interested in you, in your business, or in your product—except as you, your business, and your product can benefit the customer from his own point of view.

In most regular channels of advertising, the first job is to create an in-

terest—to gain the customer's attention. But when you use the local touch to advertising, you are appealing to an existing customer interest. You save the time, money, and effort of creating an interest from scratch!

An Illinois dealer said, "we gave this local touch to advertising a six-week trial and found that our advertising budget (using the same amount of cash) reaped a far greater harvest in additional sales volume. We set aside one window for the displays of various civic and women's organizations. We contacted their presidents, inviting them to use the window. This was the start for new friendships. Then we followed through with direct mail with mailing lists compiled from membership lists. We gave a movie made by a local movie-camera



"You can't beat this Sinclair hand"

The deck is definitely stacked in your favor when you deal with Sinclair. Every tank-load of SINCLAIR LP-Gas puts you out front with the five famous Sinclair extras — INTEGRITY, REPUTATION, QUALITY, PERFORMANCE and GOOD SERVICE. You get the kind of a hand that adds up to more satisfied repeat customers — and a faster-growing, more profitable business for you.

Find out about this top quality LP-Gas with high heating value — with moisture and impurities removed . . . then, switch to Sinclair, soon.

SINCLAIR a great name in oil



SINCLAIR OIL & GAS COMPANY

Liquefied Petroleum Gas Sales Department • Sinclair Oil Building, Tulsa, Okla.

Local Touch... There's dozens of local ideas adapted to your own local business

fan using local folks. It is a woman's show, demonstrating various broiler recipes, etc. for our stoves. We show it at the different home-economics-club meetings, and have traced several sales directly to this, and increased our gas customers, too. It has been so successful that we plan to do the same with several of our other products."

Hometown events

From Indiana came this report: "We decided to tie in with the local hometown events for our advertising. First, we made a list of the local activities which would take place in our trade area in the next six weeks. We obtained our material from the local business organizations, Kiwanis, and the Chamber of Commerce of our county seat. Our county fair, a centennial event, was during this time period, so we all grew beards, and our wives dressed in old-time clothes. We participated in the old-time car event, presented a float of 'Then and Now' of our products. My wife and I presented the winner of one race in the harness event with a blanket and cash award of \$50. It gave us a lot of fun, created a lot of hometown interest in our business and we gained new customers from all over the county, helping us to expand our trade area. We are sold on this local touch to advertising. We've found that by boosting our hometown, the hometown and all of the surrounding area is boosting us!"

A Michigan dealer enthusiastically told us, "We operate on a limited advertising budget. We find that by selling through the local hometown interests we can sell more products, gain more customers with less money and do the job quicker. We have

found that teacher's institute, association meetings, PTA conventions and the like give us a good opportunity for adding the local touch. We issue a welcome announcement previous to each meeting in our newspaper and radio advertisements. We offer a free corsage to any of this group who stop in at our place. It has given us additional free news in the paper, and creates a great deal of good will. More than that, it increases store traffic, gives us many more potential customers for more effective 'prospective' selling."

News items

"Local news items are another source for using the local touch in advertising," said another Indiana dealer. "Here in our town a falcon was turned loose to rid the town of startling birds. The falcon disappeared. We capitalized on the town interest built up in newspaper articles for an effective boost in sales volume, and much free news publicity. We ran a contest on 'Where I Would Go If I Were a Falcon...' completed in 25 words or less and offered merchandise as prizes. Election days, the hometown baseball teams, bowling teams, etc., and special recognition to various individuals offer additional opportunities for tie-in advertising."

A letter from a progressive Kentucky dealer reported, "We've had good success using the local touch in connection with the local school athletic events. We've had a high local interest in these events, anyway, and thought it would be our best bet for a try on local touch to our advertising. We use this theme in all of our advertising from window display to direct mail. We've

given away felt emblems representing each school, hats with school emblems, etc. — sometimes free — goes with each purchase of gas. We run photos of each team in our newspaper ads, with 'the best teams' — 'the best buy,' etc., copy theme.

In radio, we're sponsored musical programs before the games such as 'touchdown tunes' for football, 'across the platter' for baseball, and 'high scoring tunes' before basketball. Some believe this is a poor way to reach the feminine buyer, but every player has a mother. And that mother, aunt, grandma, and sister are all interested in athletics in which Junior participates! It's done a tremendous selling job for us."

These are only a few reports gathered from recent travels throughout the country. We have many additional letters on our desk from alert dealers cashing in on an existing customer interest for quicker, more economical sales.

Sales volume

They are the additional proof that the local touch to advertising does pay off. Whether you are limited to the weekly hometown newspaper advertising and window display or conducting an extensive advertising campaign from large newspaper ads and television programs, the local touch to advertising will give your sales volume an effective boost.

The additional cost and effort is almost nil. An additional 20 min. of planning per week, and the plan communicated to the writers of your ads and commercials will do the job. It is the minimum amount of time and effort that reaps the maximum amount of time and effort that reaps the maximum amount of advertising value from the local touch in advertising for every gas dealer. There're dozens of local ideas adaptable to your own local business that can reap a harvest of added local dollars for you! ■



Here are the features ★ your next delivery unit should have..

AND ONLY **AMERICAN** GIVES THEM TO YOU

A Custom Unit at Lowest Cost

★ New super-safe plumbing system increases pumping capacity . . . makes delivery faster . . . saves time and money.

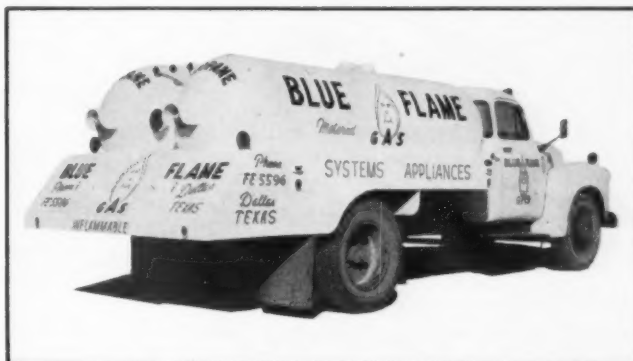
★ Tanks are locked to truck. Positively won't slip forward . . . a great driver-protection feature in case of accident.

★ Best balanced units on the road. American delivery units save wear and tear on trucks, give greater safety.

★ Motor fuel tank and meter mounted in rear . . . can't be side-swiped or sheared off . . . another American safety feature.

★ Quick changeover . . . when your long lasting American tanks are ready for a new truck, they can be changed over in just a few minutes . . . another American plus.

★ Good Looks . . . American delivery units are streamlined and good-looking . . . give you the extra safety you need with the smart appearance you want.



Deluxe Model N17. A completely enclosed, compact unit designed with all controls, motor fuel tank, meter, hose reel, power take-off and clutch controls in rear cabinet. Particularly desirable for dealers in northern areas . . . keeps all controls and equipment clean, fully protected from snow, ice or rain.



Deluxe Model B21. Fuel tank and fire extinguisher located in rear . . . meter and hose on catwalk next to driver. Also available with fuel tank, clutch, power take-off and hose reel in rear.

FINANCING AVAILABLE — Write for Information

HEADQUARTERS FOR THE LP GAS DEALER
1 order • 1 shipment • 1 invoice

Telephone STerling 4916



American Tank

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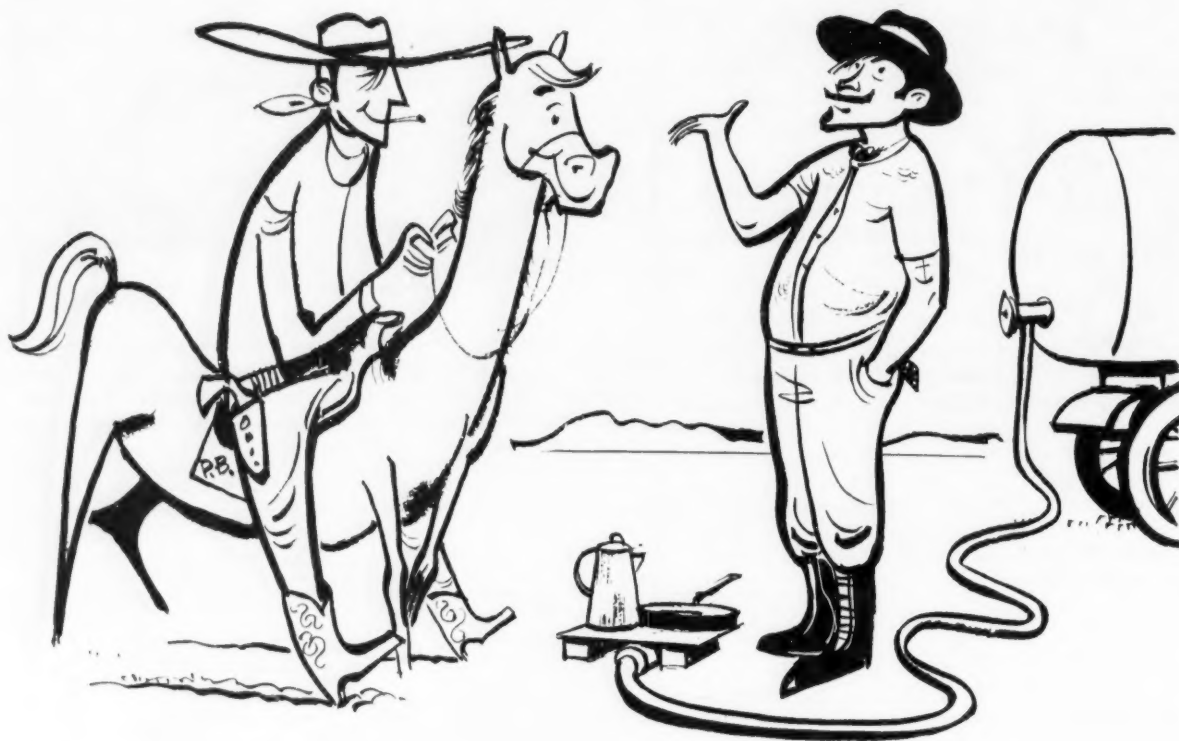


PROPANE PETE

EPISODE NO. 6

By J. Arthur Thompson

Pete rebuffs a Texas norther



ONE time Propane Pete was fiddlin' around down in West Texas. He went through a wide place in the road that they called Odessa. It was a pretty skimpy place in them days although it got bigger later. Pete decided to go on west a ways.

He'd gone a few miles when night caught him. So he just pulls his truck, Beepee, up alongside the trail and rigs up a burner to cook himself some bacon and beans. His supper was cookin' good when he looks up and here's a big cowpoke feller sittin' on a horse and lookin' down at him.

"Howdy, stranger," Pete says, affable like. "Light down and sit. This slum will be ready in a jiffy. Meantime, have a mug of Java. Busted my jug a few miles back and can't offer you any red eye."

The stranger stared at the burner for a bit and finally got off his horse. "What's that there thing you're cookin' on, amigo?" he asks polite like

Here is just the opening for Propane Pete, so he launches into a spirited rhapsody all about the virtues of L. P. gas.

"Well, fry me for a flapjack and turn me over!" ejaculated the cowboy, when Pete paused to catch his breath. "That beats anything I ever seen before. Thought I was pretty good, but that's got me topped. Say, pard, I got a small jug on the saddle. Let's wet our tonsils while them beans is gettin' soft."

The jug passed back and forth two or three times before the beans were done and the two wayfarers were feelin' good. About the time they'd polished off the bacon and beans, the cowpoke introduced himself as Pecos Bill.

Propane Pete introduces himself and does a little braggin'. Pecos Bill ain't to be outdone. He tells all about how he'd thrown the big dipper up in the sky and dug the Rio Grande with a stick to get water for his cattle. Each got to tryin' to outbrag the other and things was



How to Make LP-Records With LP-Gas

We're talking about "long-playing" profit records... the records that scores of distributors are making with Cities Service LP-Gas!

Why this extra profit? There are four excellent reasons:

QUALITY Pure... Moisture-free... Exceeding NGAA Specifications... Trouble-free... More profitable sales.

SUPPLY Dependable year-round supply from company-owned plants... Vast underground storage facilities... Material when you need it.

TRANSPORTATION Cities Service tank car and trucking fleets assure material where you need it.

SERVICES Engineering, carburetion and operational know-how backed by years of experience plus expert promotional assistance.

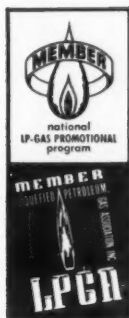
For more information, contact the nearest Cities Service office listed below. And remember... with no retail outlets, Cities Service devotes all its efforts toward helping the distributor.

SERVICE! ... Part of our name, part of our business

CITIES  SERVICE
QUALITY PETROLEUM PRODUCTS

406 W. 34th St., Kansas City, Mo.
20 N. Wacker Drive, Chicago, Ill.

500 Robert Street, St. Paul, Minn.
6611 Euclid Ave., Cleveland, Ohio



goin' good when all of a sudden it started gettin' chilly. Here comes a Texas Norther!

Pecos Bill offers to bet a jug of red eye that he can lasso that there norther and fling it clear into the Pacific ocean. Propane Pete takes him up right now. Pecos unlimbers his rope and after a couple of swings, darned if he didn't grab that norther by the tail and start swinging it around. He put all his strength into it and gave a mighty throw towards the West.

"How'm I goin' to know it lights in the Pacific?" Propane Pete demands.

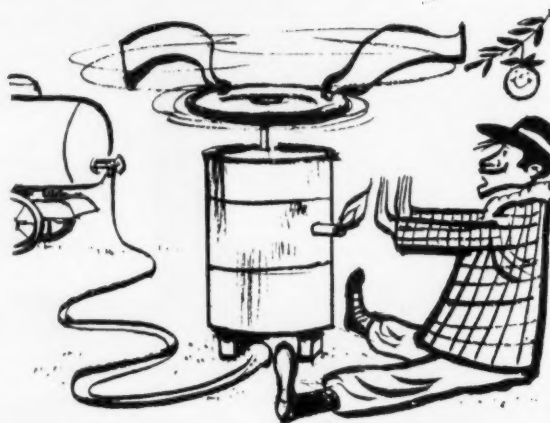
"Jist foller it and see," was the reply.

Pete cranks up old Beepee right away and takes off. That Norther was makin' plenty miles per hour as he folloed it across New Mexico and into Arizona. Then it began to slow down. Pete plots its possible course and takes off ahead of it. He watches and he notices its gettin' a bit lower and slower as it approaches the California line.

Pete does some more figurin' and makes out its goin' to land at a certain spot right in the heart of a big orange grove there in California. Now if that Norther lands there it sure is goin' to ruin the crop and Pete ain't wishful to have anything like that come out of a bet of his.

He heads for the big orange grove and looks around. There's only one young fellow there who states that he's been left in charge and that folks call him "Harry". Pete explains about the Texas Norther comin', but the young fellow looks skeptical and asks what they can do about it.

Pete thinks right fast and asks for an oil barrel. He parks old Beepee right in the middle of the grove and pulls off the front wheels. He puts one of the wheels inside the barrel and slaps the lid back on. Then, usin' a boomstick for an axle, he rigs a turbine to turn the other wheel which he is going to make into a fan. As he can't see anything else for fan blades he takes the young feller pants away from him and tears the legs apart. He



fastens these to the outside wheel and makes a two-bladed fan.

He sticks a piece of pipe into the side of the barrel for an exhaust and turns his high pressure propane in on the wheel. That turns the fan and then he lights the gas comin' into the wheel.

Believe it or not, that crude contraption of his worked like a charm. It sent up waves of heat and when that Texas Norther come along, he just melted it clear down to a popsicle. The young feller just stood there starin'. He finally introduced himself as Harry I. Horn and declared then and there that he was goin' into the L. P. gas business. He did and he's running the Harry I. Horn Company at Anaheim, Calif., right near where he and Propane Pete met.

Pete headed back for Texas to collect his bet, but Pecos Bill felt so bad about missin' his throw that he just hid out and never did pay it. And the Great State of Texas that inherited the estate of Pecos Bill never did pay off either. ■

WHAT'S NEW . . . continued from page 44

86. Packaged burner—A small, packaged burner, recently developed in the combustion division of Eclipse Fuel Engineering Co., now provides a particularly effective method for complete incineration of waste materials.

It has been designed to produce a slow, steady burn, with a semi-luminous flame, which is said to be especially suited for proper and efficient incineration. Capacity on one burner ranges from 50,000 to 500,000 Btu per hr. The flexibility of flame and heat output makes the burner ideal for safe, quick adjustments to various needs and permits complete incineration of all flue products.

Installation is not complicated because the burner assembly is complete with all necessary wiring and piping. It is ready to operate as soon as the gas supply is piped to burner and the electric motor control switch

is connected. AGA safety pilot assures main gas shut-off in the event of pilot failure.

Eclipse Fuel Engineering Co.

87. Flame cutting equipment—The Flame Cutting Equipment Co. has announced that it is manufacturing and marketing a complete new line of cutting tips, heating heads, torches, and other allied products under the trade name of "Proxy."

"Proxy" torch tips have been designed especially for use with propane, butane, and natural gas. Smooth, clean cuts with sharp top and bottom edges, and cut surfaces having low Brinell readings are obtained at the same gas and oxygen pressures, and at the same cutting speeds as when the more expensive acetylene is used as the fuel gas.

Many fabricators of armor plate have found that the use of liquefied

petroleum gas has a natural tendency to produce cuts in welded components having narrower kerfs with less adhering slag. This results in reducing or eliminating subsequent chipping and grinding, with resulting savings in overall costs.

"Proxy" torch tips have been efficiently designed to give the propane user all of the inherent advantages of this gas at no increase in the amount of oxygen used. They are manufactured to fit all standard hand-and-machine-cutting torches and cutting attachments.

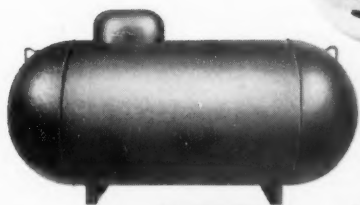
A 12-page brochure entitled "Flame Cutting With Propane Using Proxy Torch Tips" gives facts and figures concerning the savings that may be obtained when efficient equipment is used for flame cutting operations utilizing propane.

Flame Cutting Equipment Co.



**'The BLU-BLAZE
DELTA CONTROL SYSTEMS
have been a "shot in
the arm" to my
business ...'**

W. J. Gordy, Jr.,
President,
Capital Gas Co., Inc.,
Montgomery, Ala.



"The Blu-Blaze Delta Control Systems have been a 'shot in the arm' to my business. The amazing discovery we have made is that it is a booster in all departments. Not only is it a wonderful sales tool, but the service department reports no service calls on Blu-Blaze installations; our gas delivery men report that our old customers are very interested to hear the remarkable story of the Blu-Blaze heads; and consumers served by other gas dealers are making inquiries as to 'what in blue blazes is a Delta Blu-Blaze'."

IT'S HOT AS BLUE BLAZES!

The Delta Blu-Blaze System is proving its way in sales for Delta dealers just as it previously proved its way in service call reduction. A hard-hitting sales portfolio of sales-proven techniques is making Profits for others. It can do the same for you.

Write, wire or call for further details.



DELTA TANK MANUFACTURING CO., INC.

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MANUFACTURERS OF PRESSURE VESSELS AND OIL FIELD EQUIPMENT



TRUCK TANKS



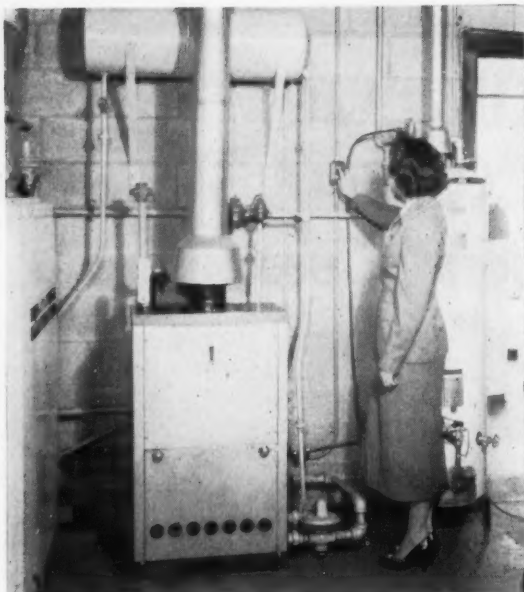
BULK STORAGE



TRANSPORTS



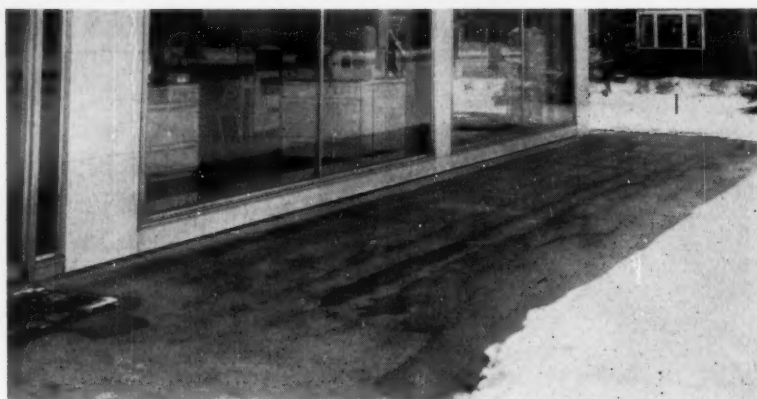
I. C. C. CYLINDERS



Push button snow removal saves time and money

Year after year since 1947, this sidewalk outside the service building of the Protane Corp. has been free of winter snow. Hot water circulates through pipe grids embedded in the concrete. Snow melts quickly; water does not run off since it quickly evaporates, leaving a sidewalk surface virtually free of moisture. Protane operates on L. P. gas service from its headquarters in Erie, Pa.

One finger on a button starts snow melting on the sidewalks. Pushing the button activates a high velocity pump. The 17 burners in the Ruud No. 5 multi-fin parallel flow gas water heater, seen at the left, light automatically. Hot water is circulated through pipe grids embedded in the concrete sidewalks. On the right is a Ruud automatic storage gas water heater that supplies domestic hot water for washrooms in the Protane building.

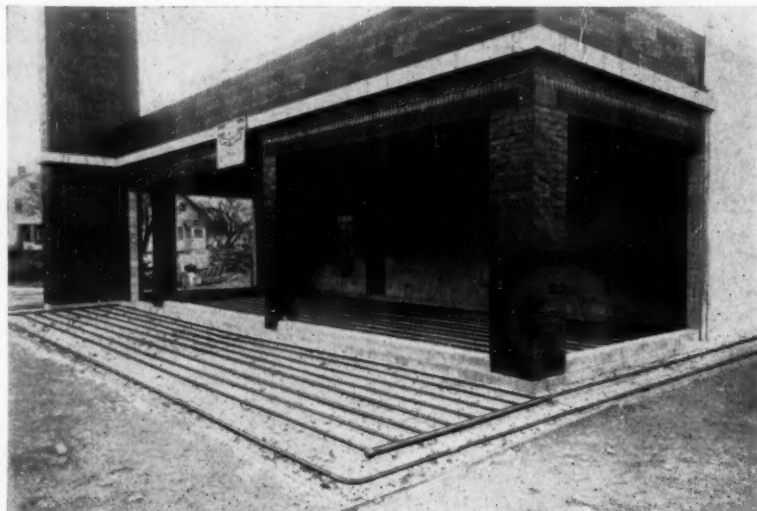


MELTING snow from sidewalks is a great deal easier on the back, and on the overhead, than taking it off with a shovel. The Protane Corp. has been proving this over the past seven winters outside its service building in Erie, Pa.

Water with permanent type anti-freeze is circulated through a grid of pipes buried in the concrete sidewalk from a boiler in the basement of the building. The heat is used intermittently. It is only necessary to light the boiler when there is a new fall of snow to remove. When the snow is almost removed, the burners are turned off, and the concrete holds the heat for several hours and completes the removal. Water leaves the boilers at 130° and enables the system to melt 1 in. of snow per hour.

And the employees can now handle their snow-removal problems by pushing a button, in the meantime avoiding loss of time from their regular duties ■

This is what residents of Erie, Pa., saw during late 1946 and early 1947 as the Protane Corp. erected its new service building. Within the structure can be seen pipe grids forming a floor-type radiant heating system. Grids of 1-in. wrought iron pipe were laid on 12-in. centers outside the building. These were embedded in concrete which extends 12 ft wide across the 51-ft front of the building.





Ordeal by Fire

Normal fabricating methods create internal stresses that can shorten cylinder life. So most manufacturers heat-treat to "stress relieve" or *reduce* these stresses.

LINDE "normalizes," as shown here, to *remove* harmful stresses *completely* and so increase cylinder life. "Normalizing" is only one of many plus values based on LINDE's 50-odd years' experience in making and using compressed gas cylinders. You can pay more, of course, but you can't buy better than the PREST-O-LITE brand.

See your local LINDE representative, or write today for full information. LINDE AIR PRODUCTS COMPANY, a Division of Union Carbide and Carbon Corporation, 30 East 42nd Street, New York 17, N. Y. In Canada: Linde Air Products Company, Division of Union Carbide Canada Limited, Toronto.

The terms "Linde" and "Prest-O-Lite" are registered trade-marks of Union Carbide and Carbon Corporation.

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Linde
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PREST-O-LITE
TRADE-MARK
CYLINDERS
FOR
LP-GAS



For Tomorrow's Househeating Market...

"Meters are a must"

"WE FEEL that meter installation is essential for increasing today's L. P. gas sales and for insuring the continued growth in the future," reports J. V. Schulz, manager of the Lawrenceville, Ill., branch office for the Peer-O-Pane Gas Co.

"Many companies have reached a near-saturation point with water heating and cooking service. The future lies in heating and bulk tank operation. Many families desire L. P. gas heating, yet family budgets too often find the expense of investing in bulk tanks and buying the fuel in bulk makes too much of a strain on the monthly budget. Meters—plus a low-cost installation charge—will solve this obstacle and sell more and more L. P. gas-heating systems, making more and more complete L. P. gas homes practical for every family. It will insure the sales volume for years to come."

Peer-O-Pane Gas Co. started its meter installation service plan in May 1955. Local response to the announcement of the new policy was immediate. Customers, both regular and potential, began calling for additional information, and within 10 days following the first advertisement telling of the meter service, 80 customers had signed up for it.

In spite of an investment in tanks, regulators, and meters that is expected to reach \$300,000 in the next three years, Peer-O-Pane's management anticipates a fast payout. All costs will be borne by the company, the only offsetting factor being a \$50 flat installation charge which the customer must pay. The company owns all installation equipment, tanks, regulators, and meters, and does all the installation work. It also selects the size of the tank.

The one requirement for this meter service is the use of househeating equipment. The customer must be heating with L. P. gas or plan to install LPG heating equipment immediately. This paves the way for additional bulk tank customers.

This low installation price of \$50, purchasing the gas, and paying as you go make the use of bulk tanks practical for the family budgets. It encourages the purchase of home heating equipment for fuel in the territory, providing an additional core of LPG bulk tank users for the future years.

Peer-O-Pane's meter customers read their own meters, and put the reading on company supplied cards, between the 1st and the 10th of the month. The customer mails the card to the company. All cards are in by the 20th of each month, statements prepared, and returned by mail to the customer before the 1st of the following month. Payments are due on the 1st.

Truck drivers make routine spot check readings of meters, and at the end of six months or annually, sales records are checked showing the amount delivered to each customer, and the amount remaining in the tanks.

"This balances out just the same as government taxes balance out. If the customer has underpaid, he is billed for the difference. If the records show that he has overpaid through incorrect meter reading, he gets a refund," explained Mr. Schulz.

This system of customer meter reading eliminates the necessity of additional labor cost usually involved with meter use.

Initial promotion of this new service consisted of newspaper, radio, and word-of-mouth advertising. All media were teamed up to sell this meter service, the advantages, the low-cost installation, the monthly payments of the gas-as-you-go plan. Newspaper advertisements appeared daily for 10 days in the local Illinois newspapers. Radio stations in the area carried frequent spot announcements. Regular bottle customers were contacted through visits and phone calls.

It was natural that Peer-O-Pane would be a leader in the general re-



"Meters are a must" says Mr. Schulz, manager of Lawrenceville Peer-O-Pane Co.

gion in any trend toward LPG metering. Under the leadership of President George Eiker and Vice President E. E. Rapp, the company has enjoyed a consistent growth in sales volume during its 18 years of existence. Just 10 years ago, its volume was only 10,000 gal. per month; today the two operations, one located in Lawrenceville, the other in Sparta, Ill., pump 160,000 gal. Thirty-five dealers throughout southern Illinois, eastern Missouri, and western Indiana are now served by the two branches.

Two managers and a dozen employees man the two locations. Equipment consists of six bottle trucks and four tank trucks. LPG is purchased from Beacon Petroleum Co. at a rail siding in Lawrenceville.

Selling no appliances, Peer-O-Pane works closely with all local appliance dealers and heating concerns in the trade territory. The retailers sell the appliances, the Peer-O-Pane company installs them, and sets up tanks for gas service. All tank installations are given a full check by the manager before gas is turned on.

With extensive promotion, customer acceptance has come rapidly. New home owners are enthusiastic as the plan opens the door for this finest of heating fuels at a cost every family can afford.

According to Manager Schulz, "More than 85% of the new homes in this territory are equipping for LPG heating, using our bulk tanks and meter service. It's ample proof to us that meters are a must, removing all customer obstacles for the using and enjoyment of L. P. gas homes." ■



Charlie Wilkerson makes three delivery trucks do the work of five . . . using 2-way radio

Leading Florida L-P distributor delivers more gas, makes more friends, operates more profitably with the help of G-E 2-way radio

The radio-equipped gas delivery trucks of the Charlie Wilkerson Gas Company cover the Pensacola market, and deliver more gas to more customers faster than vehicles without radio. Radio saves money, too! Operating costs are reduced, deadheading eliminated, and customer relations kept at a high level.

Three do the work of five

Charlie Wilkerson reports that now three radio-equipped vehicles do the job which previously required five trucks—radio makes this possible. Phone orders from customers are relayed to trucks for prompt service. Emergency orders are handled in routine fashion, driver overtime has been drastically reduced.

A profitable radio operation

Profitable operation due to the G-E 2-way system has made a big difference to the Charlie Wilkerson Gas Co. It can make a big difference to your business operation, too.

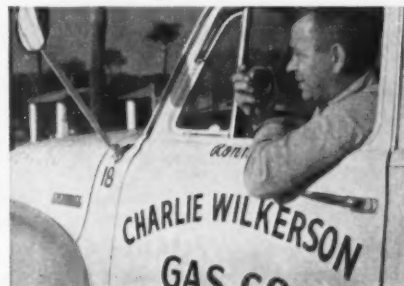


Investigate the new G-E Progress Line Radio

Call your local G-E Communication Counselor for the details of the new Progress Line of 2-way radio. Or, write: General Electric Co., Communication Equipment, Section X3116, Electronics Park, Syracuse, N. Y.



Dispatcher contacts radio-equipped trucks instantly, relays phone orders, new instructions. Radio reduces deadheading, makes three L-P delivery vehicles do the work of five.



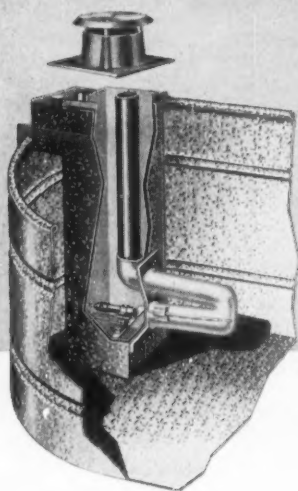
Radio-equipped trucks leave each morning with a full load, return with empties later in the day. At completion of regular delivery drivers check with dispatcher for nearby customers who may be prospects for full L-P tanks remaining on trucks.

Progress Is Our Most Important Product

GENERAL  ELECTRIC

**Reliable... Popular
Profit-making**

JOHNSON WATER WARMER



Automatic stock tank heater

Cattle are more profitable when their winter drinking water is raised to a drinkable 48° temperature. So cattlemen and dairymen are looking to Johnson for efficient, economical and worry-free stock tank heating... with good reason.

Simple Installation, Dependable

The Johnson Water Warmer is the last word in LP-gas fired stock tank heaters. It maintains automatic 48° water temperature even in coldest weather, and with utmost efficiency and convenience. Installation is simple on any type steel, wood or concrete tank; requires one tool — a wrench. Operation is simple and dependable — guaranteed condensate control — weather-proof. Quick access to controls makes it easy to inspect.

Enjoy Johnson Profit Features!

Sell the Johnson Water Warmer on its many merits. Profit from many sales, and from average LP-gas sales of 600 lbs. per year per heater. Profit from the good will of satisfied customers.

Write for complete details now!

JOHNSON GAS APPLIANCE CO.

597 E Avenue N.W., Cedar Rapids, Iowa

IF IT BURNS GAS LOOK TO
SINCE 1901 **JOHNSON**

news



Texgas dealers told of 25 million gal. of storage

The dealer organization of the Texgas Marketing Co., a division of Texas Natural Gasoline Corp., held its fall dealer meeting in Houston recently.

The meeting was handled by President Alton S. Lutz, and Mark Bruner vice president, spoke on the company's production and storage program. He pointed out that much new production has been made available, and increased underground storage facilities in the Houston area now offer a capacity of more than 25 million gal. of butane-propane storage in the salt at Pierce Junction terminal.

Industry advisors confer on Coleman air conditioning

A representative group of 30 top L. P. gas executives and six representatives of industry magazines and associations were guests of the Coleman Co., Wichita, Kansas, for a two-day conference on gas air-conditioning. The visiting executives, serving as an advisory board, heard a complete and confidential report on the gas research program now being carried on by Coleman on year-round

control of atmospheric temperature and humidity by means of L. P. gas operated appliances. Coleman executives presented complete statistical data on the operation of two five-ton gas motor air conditioners now on test.

Details of Coleman's additional research on types of air conditioning actuated by means other than internal combustion engines was also outlined. These included a revolutionary new type of external combustion engine now under development, and on binary type refrigerants, open type absorption and conventional absorption.

Members of the Industry Advisory Panel included:

George C. Vogl, Blaugas Co.; E. O. N. Williams, Bottled Gas Corp. of Virginia; Thomas H. Quail, Bottled Gas Corp. of Wisconsin; R. J. Dodson, Butane Gas Co.; M. L. Trotter, Carolina Butane Gas Co.; Eugene W. Schrage, Charles City All-Gas Co.; Clyde Cheatum, Coleman Gas Service Co.; H. C. Sayers, Colorado Natural Gas Co.; Larry H. Dow, Sr., Dupane Gas, Inc.; Arthur E. Bone, Eastern Propane Co.; Ernest Fannin, Fannin's Gas & Equip. Co.; A. C. Ferrell, A. C. Ferrell Butane Gas Co.; John D. Stone, Gas Inc.; F. L. Fagan, Gem



Focal point of the Coleman conference on gas air conditioning was this unit which has logged over 1500 hours on L. P. gas. Studying the gas motor air conditioner which L. P. distributors hope will increase their summer loads are Larry Ash, Coleman Co.; W. J. Malchiodi, Cleveland, Ohio; C. J. McAllister, LPGA president, Waldorf, Md.; Ralph Weaver, San Jose, Calif.; V. T. Mavity, Dothan, Ala.; Y. D. Ewart and Don B. Barton, Kansas City, Co.; T. E. Ennett, Rockford, Ill., and Alwin B. Newton, Coleman engineering vice president.

Why '56 Ford Trucks can bring new savings to your delivery work



Most horsepower per dollar in the '56 Ford F-500. Proved by comparisons of net horsepower and suggested list prices of all 1½-tonners!

Cut delivery time with 26% more USABLE power!

Want a truck that's powered to keep up with traffic, save road time? Want more power *reserve* for safer passing, easier hill climbing? Ford's new F-500 for '56 delivers up to 26% more power to the rear wheels. Take your choice of new 133-h.p. Six or new 167-h.p. Y-8. Each leads its class in *usable* (net) horsepower. And each has modern Short Stroke design for more miles per gallon, less engine wear per mile for longer life.

Cut driver fatigue, increase safety with Driverized Cabs!

Only Ford offers the safety and comfort of *Driverized* Cabs! Both, Standard and *Custom* Cabs, have the driver convenience of widest opening doors of any leading truck . . . new full-wrap windshield. AND, new *Lifeguard* Design. Deep-center steering wheel cushions the driver from steering post . . . double-grip door latches help protect against doors jarring open in accidents. Seat belts optional at extra cost.

Cut per-unit delivery costs with new, bigger payloads!

Now, take over 1,000 lbs. more load on every trip! New 15,000-lb. GVW boosts the F-500's top body and payload allowance to a whopping 10,495 lbs. There's new value *throughout*: new stronger frame . . . new high-capacity *tubeless* tires . . . new, more durable transmission . . . new bigger brakes, with *Power Braking* standard with Y-8 engine. To get the *most* truck for your money, call your Ford Dealer now!

ONLY '56 FORD TRUCKS GIVE YOU THESE MONEY-MAKING FEATURES

- The most power per dollar—proved by comparisons of net horsepower and suggested list prices of *all* truck lines!
- Short Stroke power standard in every truck. Choose from a Six and seven Y-8's, from 133 to a mighty 200 horsepower!
- New tubeless tires standard on every model, a Ford first. They run up to 25° cooler, last longer, resist punctures!
- Level-Action Cab mounting on every truck, reduces road vibration and twist, for added comfort . . . longer truck life.

MAKE '56 A MARTIN YEAR

SELL THE
COMPLETE

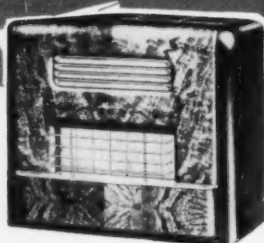
Martin

GAS HEATER line

8 Fully Vented Heaters
15,000 BTU to 85,000 BTU

23 Unvented Heaters
10,000 BTU to 50,000 BTU

All Martin Heaters are
AGA approved for
natural, liquefied, and
manufactured gases.



V370



OVER
50 YEARS
HEATER
EXPERIENCE

MARTIN STAMPING & STOVE CO., Huntsville, Ala.

Automatic Gas Co., Inc.; I. W. Patterson, General Gas Corp.; W. F. Lewis, Liquigas Co., Inc.; Harold E. Gerke, Midland Propane Co.; Ralph Weaver, Pacific Delta Distributors; C. J. McAllister, Parlett Gas Co.; W. J. Malchiodi, The Protane Corp.; Talmage Lovelady, Pure Gas Service Co.; Harold C. Ten Brook, Ready-Flame, Inc.; T. E. Ennett, Rockford Propane Co.; Charles R. Anderson, St. Petersburg Gas Appl. Co.; Don B. Barton, Skelgas Division; Yale D. Ewert, Skelgas Division; Victor T. Mavity, Southern Liquid Gas Co.; Lewis M. Mitchell, Standard Gas & Equip. Co., Inc.; C. R. Dietrick, Suburban Propane Gas Corp.; Kenneth H. Dickson, Uregas Service, Inc.; Walter F. Verkamp, Verkamp Corp.; J. H. Winton, Winton Automatic Gas Co.;

Dearborn Stove plans northeastern expansion

Expansion plans for the northeastern section of the country announced by Dearborn Stove Co., Dallas, include the selection of key distributors in carefully chosen distribution centers in New York state, Metropolitan New York City, New Jersey, Pennsylvania, Virginia, West Virginia, Delaware, Maryland, and the eastern half of Ohio.

In 1954, Dearborn appointed Suburban UDI at Portland, Maine, and the Arthur Hahn Co. at Hartford, Conn. to distribute the Dearborn line in the New England states. First-year sales of these companies in New England were definitely satisfactory. In 1955, however, sales of both companies climbed rapidly.

In addition to complete lines of vented and unvented gas space heaters, the newly appointed distributors will handle water heaters, wall furnaces, evaporative coolers, and the Hobo-Chef portable barbecue.

Bureau of Standards prints report on meter provers

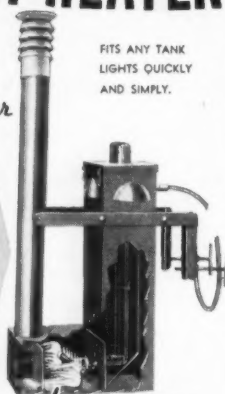
In the report of the 40th National Conference on Weights and Measures, the National Bureau of Standards includes verbatim reports of the papers and discussions of the symposium on methods of proving liquefied petroleum gas liquid meter systems.

Papers presented by E. E. Reed, Phillips Petroleum Co.; John MacIntosh, Suburban Rulane Gas Co.; R. R. Wellington, Skelly Oil Co.; and E. F. Wehmann, Neptune Meter Co., reported development work and tests with meter provers operating on both the gravimetric and the volumetric

the Broyhill HANDI-HEATER

a bottle
gas stock
tank heater

- Fits any tank and lights quickly and simply
- Safe, A.G.A. approved automatic shut-off and temperature controls
- Easily installed on any wood, metal or concrete tank
- Dependable—operates efficiently in sub-arctic weather



FITS ANY TANK
LIGHTS QUICKLY
AND SIMPLY.

A blast furnace of heat striking 4 sides of the heat chamber

OTHER QUALITY

Broyhill

FARM EQUIPMENT

- Spraying Equipment
- Liquid Fertilizer Applicators
- Liquid Fertilizer Injectors
- Trailers and Self Propelled Hi Clearance Wagon Hoists
- Aluminum, Rubber lined and Steel Tanks

Broyhill

COMPANY

DAROTA CITY,
NEBRASKA



NEW DRILL CASE For the Gas Serviceman

- Holds 41 drills — sizes 40 to 80.
- Each thumb drill has size stamped on handle in sequence.
- Each drill fully protected. Cannot break in case.
- Servicemen can carry in hip pocket. All metal — compact.
- Set will take care of general servicing requirements.

Original Manufacturers of Conversion
Materials and Special Tools Serving
the Gas Industry for Over
35 Years.

Write for Catalog

ANDERSON and FORRESTER
3563 LARIMER STREET, DENVER, COLORADO

**Now... FOR THE FIRST TIME...YOU CAN
SEE FOR YOURSELF WHERE AND TO WHOM
YOUR ADVERTISING IS GOING!**

Once again BUTANE-PROPANE News has taken the lead and set a new standard of circulation reporting in the Liquefied Petroleum Gas Industry with two additional and important breakdowns to let advertisers see what they are buying.

These breakdowns so far are exclusive with BPN in this industry—but they provide information you should insist on having before you contract for space in an LPG publication....

The Iron Curtain is Lifted

On Circulation Audit Reports

1 • An Affidavit of the NUMBER of PLANTS reached ...to show you WHERE your advertising is going.

Does your present medium give you excessive "penetration" to minor employees in some plants—and miss other important plants entirely?

You don't know—if circulation *totals* are all you have to go by; but a count of the *number* of plants you reach gives you a check on this... shows you the *breadth* of your market coverage.

No circulation auditing bureau as yet audits this figure—so BPN gives it to you as an "extra" in affidavit form. It shows that your advertising in BPN goes every month to 8,193 plants* in the major industry groups.

2 • An Audit of circulation BY JOB TITLES...to show you WHO SEES your advertising in those plants.

Circulation to employees who exert no buying influence in their companies is of questionable value to you—and you may be getting a lot of that. You need an *occupational analysis* to see the calibre of people you are reaching with your advertising.

BPN's breakdown of circulation by *job titles* as well as by *industry groups* has been audited by the Business Publications Audit of Circulation (BPA) for the 12-month period ending June 1955.

This audit shows that 82% of BPN's circulation goes to executives in positions of authority to buy or specify your products.

8,193 different plants . . . and . . . the KEY MEN in those plants!

This is the most complete and effective coverage of the LPG market that is given by any publication.

*MAY 1955 COUNT

★ **FIRST CHOICE** of LPG DEALERS in every reader survey conducted by manufacturers.

★ **FIRST CHOICE** of ADVERTISERS every year for 16 straight years.

N B P

A Jenkins Publication • 198 S. Alvarado, Los Angeles 57

BUTANE-PROPANE
News

BPN

Headquarters for L.P. gas information since 1931

BPN led its closest competitor in advertising by 33% in 1954—and is leading by 35% in 1955.

principles. While there is as yet no acceptance of a basic design principle that could lead to standardization, the experimental results indicate that the volumetric will be followed.

Delegates at the conference represented 36 states, the District of Columbia, and numerous counties, cities and federal agencies.

10-mo. furnace shipments exceed 12-mo. 1954 total

Two months before the year's end, shipments of gas-fired warm air furnaces had exceeded the record total

for a full year, boiler shipments were greater than any full year before 1950, conversion burners had staged a phenomenal recovery, and water heater shipments had exceeded the total shipments of 1954. For every month—January through October—range shipments had shown an increase over the same month of 1954.

According to GAMA's telegraphic survey, 1,921,300 ranges were shipped during the 10-month period, a 12.8% increase over the 1954 period. The 10-month figure for warm air furnaces stands at 702,300, greater than the 655,900 total for 1954. Gas-fired boil-

ers for the period total 77,400, a 13.3% increase over last year. Water heater shipments reached 2,368,900, a 22.4% increase over the same period of 1954, and greater than 1954's total of 2,281,100.

Second price increase felt by Eastern Seaboard

The Eastern Seaboard felt the second price increase on LPG in a month (see BUTANE - PROPANE News, December, p. 98) when the majority of major suppliers marketing propane on the area notified their contract customers of a 0.5 cent per gal. hike, with effective dates ranging from Nov. 14 to Dec. 11.

Action by the eastern firms generally follows a similar advance by producers in the Mid-Continent area. Propane prices in Oklahoma have now risen to 4 cents per gal. Although several producers are still quoting 3.5 cents per gal., it was learned that they have notified contract customers of price advances.

Ammo-Gro Division sold by Specialty Oil Products

Robert E. Maloney, president of Specialty Oil Products, has announced the sale of the Ammo-Gro division to a new group incorporated under the name of Ammo-Gro Inc.

The group backing Ammo-Gro Inc. is headed by Frank Chilson, Houston, chairman of the board, and Kenneth Purchase, San Francisco, president. Mr. Chilson was formerly president of the Hydrocarbon Construction Corp. and vice president of the Fish Engineering Corp., both of Houston. He has also been identified with the Fluor Corp. Ltd., Los Angeles. Hydrocarbon Construction recently completed the anhydrous ammonia plant for the Phillips Chemical Co. at Adams Terminal, Texas.

Mr. Purchase, who will head up the distribution organization of the new company, was formerly vice president of Specialty Oil Products and general manager of the Ammo-Gro division.

New Fullerton plant occupied by American Meter

American Meter Co., Philadelphia, has moved the first unit of its Pacific Coast manufacturing, sales and general offices from metropolitan Los Angeles, where it has been located for more than 50 years, to its new suburban 20-acre site at 300 N. Gilbert Ave., Fullerton, Calif.

The new 60,000 sq ft, single-story



Dollars all over the highway!...get your share with a

TEXAN

THE COMPLETE PACKAGED LPG FILLING STATION

BUTANE MOTOR FUEL

The Texas L.P.G. Service Station is fabricated in our plant, completely assembled and moved to you as one unit. Constructed in accordance with the A.S.M.E. Code. Complying with all rules and regulations for safe and economical operation.

If you are an L.P.G. Dealer and want to capture some of those highway dollars, then the "TEXAN" is the answer.

The "TEXAN" comes in all sizes to fit your need. For details, write, wire, phone us today for complete information.

Industrial
MANUFACTURING CO. of TEXAS, INC.

POST OFFICE BOX 698
SWEETWATER, TEXAS

Phone 4862

Give your sales a boost . . .

Give your customers the best . . .

SCAIFE LIFT TRUCK CYLINDERS

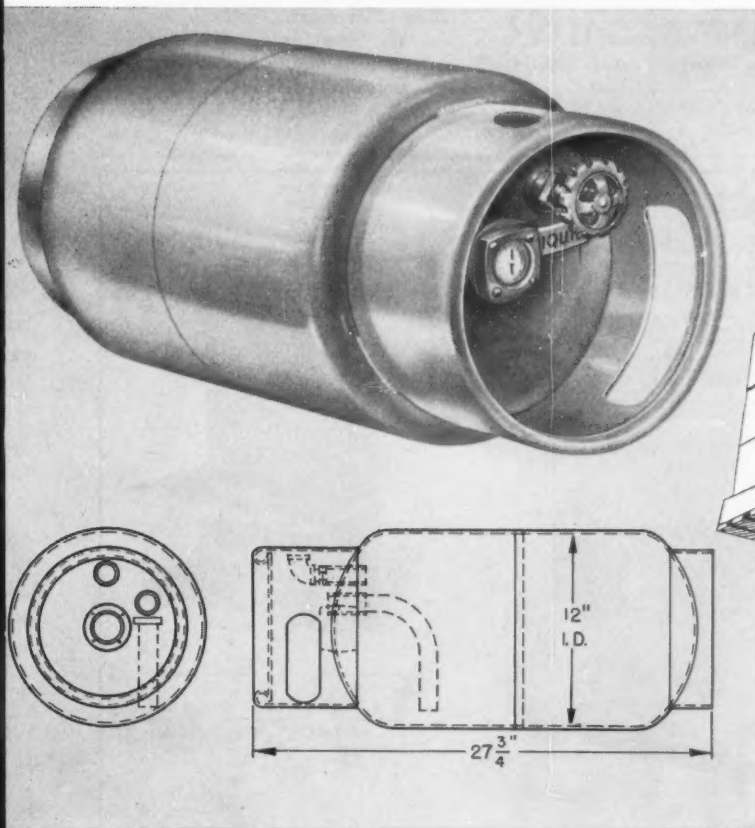
Scaife LP-Gas tanks for fork lift trucks can help you take advantage of the newest opportunity to boost your LP-Gas sales. If you want to start out on the right foot by servicing the market with a dependable line of removable lift truck cylinders, you'll find Scaife Company offers you the assurance of top quality and sound product design.

Scaife Fork Lift truck cylinders are produced by an organization that specializes in the manufacture of pressure vessels for air, liquids and gases. Only the highest quality materials . . . particularly suited for this specialized use of LP-Gas are specified. Every unit complies with the ICC code and each unit is subjected to rigid quality control practices, including a hydrostatic test for structural soundness and an air test for gas tightness before it leaves the plant.

Scaife designs have been developed to efficiently meet the requirements of lift truck manufacturers.

Check these advantages and you'll see why Scaife fork lift truck cylinders are your best bet in this new industrial truck market for LP-Gas.

- Neat, lightweight, high strength, 2-cup construction.
- Easy to read ICC data stamped on rugged Valve Protection Ring.
- Quality Controlled through every step of production . . . rigidly tested and inspected.
- Three standard sizes available . . . (20, 34 and 44 pound capacity propane).
- Careful arrangement of valves and fittings to assure easiest possible servicing.

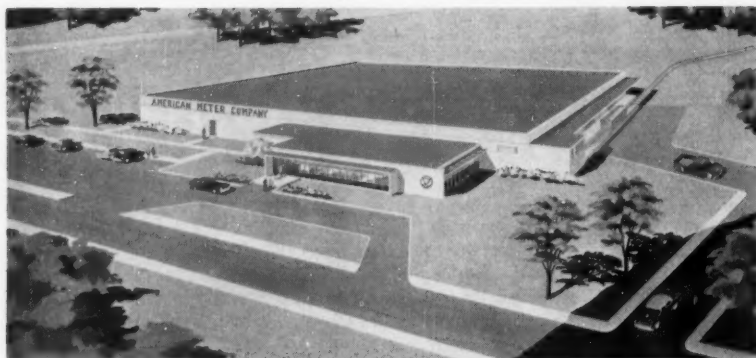


SCAIFE COMPANY

OAKMONT (PITTSBURGH DISTRICT), PENNA.

MAKERS OF PRESSURE VESSELS AND DRAWN SHAPES

SALES OFFICES: GENEVA, ILL., ATLANTA, GA., RIDGEWOOD, N.J., OAKMONT, PA.



Artist's conception of American Meter's recently completed plant at Fullerton, Calif. The new suburban location provides for future expansion of production facilities.

structure has modern production facilities for the manufacture of gas meters and regulators and will provide for expanding warehousing and servicing of commercial and industrial meters and regulators. Employment for more than 100 persons will be provided at the new plant.

The move, announced by George W. Stevenson, general manager of Pacific Coast operations, was made in anticipation of the continued rapid growth of the gas industry in the West. The new suburban location will also provide for future expansion of production facilities.

American Meter has a total of 11 plants throughout this country and Canada, including other California plants at San Francisco and Alhambra.

National Propane buys Shellane midwest operation

Shell Oil Co. has sold its bottled gas business in the Middle West to the National Propane Corp. in a transaction involving about \$10 million. The purchase will be financed by National through the sale of \$5 million of 4- $\frac{3}{4}$ %, 15-year notes to in-

surance companies and a public stock offering.

National Propane proposes to carry on the operation through a Great Plains gas division and will continue the Shellane trade name under which Shell Oil has been marketing LPG in 9 midwestern states: Illinois, Indiana, Iowa, Michigan, Minnesota, Missouri, Ohio, South Dakota, and Wisconsin.

Eleven bulk plants are involved in the transaction. At present some 500 dealers and 180,000 customers are served by these plants.

Petrolane earnings up; announces new acquisition

P. E. Foote, president of Petrolane Gas Service Inc., Long Beach, Calif., reported \$311,714 net income for the first nine months of 1955, equal to 66 cents a share on 470,000 shares, compared with \$254,756 or 54 cents a share on the same number of shares for the corresponding period of the previous year.

Mr. Foote also announced the purchase of Western Gas & Power Co., Yakima, Wash., which distributes L. P. gas throughout the Yakima Valley, Ellensburg, and Cle-Elum and adjacent counties in Washington. The company has established a distribu-



| Size Main Top | Ck. Top Height |
|------------------------------------|----------------|
| 20 $\frac{1}{2}$ x20 $\frac{1}{2}$ | 36" |

California Representative
MR. DONALD TELLER
135 Palisades Avenue
Santa Monica, California
Phone: EXbrook 4-2202

SINCE
1902



"good as
gold"

— IMMEDIATE DELIVERY —

GAS
STOVES



COAL
WOOD
STOVES



| Size Oven | Size Broiler |
|---------------------------------------|--------------------------------------|
| 16 $\frac{1}{2}$ x18x14 $\frac{1}{2}$ | 13x16 $\frac{1}{4}$ x5 $\frac{1}{4}$ |

| Drawer | Floor Space | Height Cook Top | Storage Compartment | Size Broiler | Size Oven | Main Top |
|---------------------------------------|---------------------|-----------------|---------------------------------------|--------------|-----------|----------|
| 13 $\frac{1}{2}$ x17 $\frac{1}{2}$ x5 | 25x37 $\frac{1}{2}$ | 36 in. | 21x16 $\frac{1}{4}$ x14 $\frac{1}{2}$ | 13x15x5 | 16x20x15 | 22x37 |

"Send For Our Complete Line Catalogue and Price List"

ORBON STOVES, INC. • Box 331, Belleville, Illinois



A.G.A. Approved



MORE FOR YOUR MONEY *you name the size . . .*

Of course, Flint Tanks for the handling of liquefied gases, that must be stored under pressure, are fabricated in accordance with ASME Code for 250 psi working pressure. They meet and exceed all requirements of U-69. Every plate and completed vessel is shop inspected. Modern fabricating methods take advantage of good design — with press fitting to close tolerances, machine welding and facilities available for X-ray and stress relief inspection.

But more than these Flint provides the advantages of a major plate steel fabricator; complete integration of facilities of the Tulsa and Memphis plants employing volume production methods, and the know how accumulated during forty years of service as a "tank builder."

Flint builds every size LPG tank for Domestic Systems to the largest Bulk Plant Unit.

Also distributed
and sold by
ANCO
Mfg. & Supply Co.
P. O. Box 1066
Tulsa, Okla.
and
East St. Louis, Ill.
Des Moines, Ia.

L. P. G. TANK SIZES

| | |
|-----------------------------------|---------------------------------------|
| 250 Gal. 30" dia. x 92" O.A.L. | 8,000 Gal. 72" dia. x 39'-7" O.A.L. |
| 330 Gal. 30" dia. x 116" O.A.L. | 10,000 Gal. 72" dia. x 49' O.A.L. |
| 500 Gal. 37" dia. x 120" O.A.L. | 12,000 Gal. 72" dia. x 58'-1" O.A.L. |
| 1,000 Gal. 41" dia. x 193" O.A.L. | 18,000 Gal. 94" dia. x 51'-6" O.A.L. |
| 6,000 Gal. 60" dia. x 43' O.A.L. | 30,000 Gal. 106" dia. x 68'-4" O.A.L. |
| 7,145 Gal. 60" dia. x 51' O.A.L. | |

WRITE FOR ILLUSTRATED CATALOG

FLINT STEEL CORPORATION

MEMPHIS, TENNESSEE

• TULSA, OKLAHOMA



Fisher Governor Co.'s recently completed research and engineering center in Marshalltown, Iowa, houses the enlarged product engineering department, adjacent to the research laboratory area. Sales engineering, executive offices, and general office departments are also in the three-story brick structure. The air conditioned building covers approximately half a square block. About 200 of Fisher's 1250 employees are assigned to the building.

torship in Othello, Wash., centrally located in the fast-developing Columbia Basin area.

These acquisitions, together with recent purchases in Baker and La Grande, Ore. and in Moscow, Orofino, Lewiston, and Grangeville, Idaho, complete another important step in the company's program of expansion in the Pacific Northwest.

On Oct. 24, Petrolane declared a quarterly dividend of 15 cents a share, payable Dec. 24.

Canada's Superior Propane acquires Northern Propane

Northern Propane Gas Co., Fort William, Ontario, Canada, has been acquired by Superior Propane Ltd., Toronto. Northern Propane will operate as a wholly owned subsidiary, continuing under its present name with substantially the same executive staff.

The acquisition is the first step toward an intensive development of the

market in the northern part of Ontario, J. F. F. McQueen, president, states. He forecasts construction of four or five additional storage plants by Northern Propane in the near future in order to make L. P. gas more readily available to the mining, lumber, and farming industries in the northern areas of the province.

The new subsidiary operates in Port Arthur as well as Fort William, and also covers an area of about 200 miles radius around these centers and including Manitowadge and Long Lac.

Northern's sales of propane are presently at an annual rate of 1 million gal. Superior Propane has annual sales of about 6.5 million gal.

Algas Fuel Service buys Annan's Butane

As part of its broader coverage and service to the San Joaquin valley, Algas Fuel Service Inc., Los Angeles, has purchased Annan's Butane & Appliance Service in Modesto, Calif.

Under the direction of Roland Usher, Algas vice president, the company will continue to operate under the same name, and service will cover the general area covered by Annan's.

Annan's has provided residents of

PROFITS PLUS with the Complete Range Line...



Enterprise

DEALERS . . . the Enterprise range line is built with you in mind. For each dealer handling Enterprise, the complete range line, there is profits plus. Because of the completeness of the Enterprise range line, the scope of your market broadens. Thus, you close sales you otherwise would have missed. There is an Enterprise range available to you to fit every kitchen need.

CALL • WRITE OR WIRE •



PHILLIPS & BUTTORFF MFG. COMPANY

NASHVILLE • TENNESSEE • Established 1858

the LMC Money Maker



*is on the road to setting
new records in dealer profits*

The LMC Money Maker with its increased capacity of 7500 to 8000 gallons with 250 lb. W.P. allows high payloads with a low tractor and trailer investment.

The neckdown design gives you a low center of gravity, higher road speeds and more gallons in your storage tank when you need them. Whatever your LP Gas transport problem, you'll find this unit is a Money Maker for you.

In states with higher legal weight limits, our 9000-plus gallon neck-down unit may be your best buy.



Buy on the LMC budget plan!

WRITE FOR ADDITIONAL INFORMATION, PRICES AND PAYLOADS

LUBBOCK MACHINE & SUPPLY CO

P. O. DRAWER 1589

Porter 2-5261

LUBBOCK, TEXAS



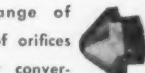
SEE *Griffiths* FIRST FOR

APPLIANCE SERVICING MATERIAL

Save time, trouble, and cost, with one reliable, experienced supplier.

CONVERSION PARTS

Complete range of sizes on all types of orifices and other conversion needs.



TOOLS

Everything you need to do the job quicker and better.



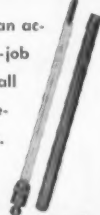
HANDLING EQUIPMENT

Simplify your delivery service with M/W Cylinder Trucks and YEATS Appliance Dollies.



TESTING THERMOMETERS

Provide an accurate on-the-job check for all servicing requirements.



SEND FOR THIS COMPLETE CATALOG



THE E. F.
Griffiths COMPANY
346 EAST WALNUT LANE
PHILADELPHIA 44, PA.



Proper operation of L. P. gas furnaces and torches was demonstrated to Petrolane salesmen by Bob Frazer, vice president of Mutual Liquid Gas Equipment Co., Gardena, Calif., at a recent sales meeting of the Long Beach district of Petrolane Gas Service Ltd. Monthly meetings are held under the direction of District Manager Harold Snell.

Modesto and surrounding areas with both fuel and carburetion service for several years and the same service will be continued by Algas.

Rex Pickering has been appointed as manager of the Modesto operation.

PanAm Insurance adds to Houston building

Earl W. Gammage, president of the Pan American Insurance Co. group of Houston, announced jointly with

Morris Kagan and Israel Rudy, investors, the signing of a long-term lease of more than \$1 million for the erection of a four-story addition to its office building in Houston.

Additional office quarters will be provided for the rapidly expanding Pan American Fire & Casualty Co. and Pan American Insurance Co. of Houston.

The new structure will adjoin the present two-story Pan-American building built in 1953 by Kagan & Rudy. With the new addition, the combined Pan American Insurance building will consist of 72,000 sq ft of air conditioned office space, representing a 200% increase in office space for the writers of L. P. gas insurance coverages in the South and Southwest.

Brunner celebrating 50 years of operation

Brunner Manufacturing Co., used the Air Conditioning - Refrigeration Industry Exposition held at Atlantic City recently to kick off its 50th anniversary year promotional campaign.

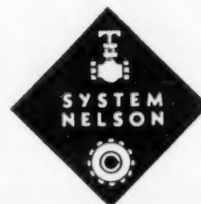
The Brunner exhibit, one of the largest at the show, featured a 60-ft long exhibit with the theme "Fifty Years of Compressor Progress." A huge map of the United States dis-

For L. P. Gas Storage



LEADING FIRMS PICK *NELSON*

There are over 250 SYSTEM NELSON bulk plants for the storage of LP Gas and Anhydrous Ammonia located in 25 states. Leading bulk plant operators have found that it pays to deal with an organization that has the experience, equipment and engineering skill necessary to do a complete, top quality job. Take advantage of this extra value and service on your next storage problem. Contact us for a meeting with an experienced sales engineer.



EDWARD S. NELSON, Ltd.

Dept. L-1
Clarksdale, Mississippi

THE LEADING NAME IN THE BULK STORAGE FIELD!

THIS KIND OF LPG TALK **PAYS OFF**

*in greater sales and
customer satisfaction*

"TRUCK 2 TO DISPATCHER:
AT JOHNSON FARM—MRS. JOHN-
SON NEEDS EMERGENCY REPAIRS.
SEND SERVICEMAN."



"TRUCK 6 TO DISPATCHER:
I'M ON ROUTE 71, MILE EAST
OF 2, WITH BROKEN FAN BELT."



"DISPATCHER TO TRUCK 3:
WHEN YOU'RE FINISHED THERE,
GO 2 BLOCKS SOUTH TO 729
WINSLOW. CUSTOMER EMPTY,
AND NEEDS FUEL RIGHT AWAY."



In this highly competitive business, Degree/Day records have helped keep customers happy with regularly scheduled deliveries. But how about non-regular sales that build volume and bring in new customers . . . or the customer whose tank unexpectedly runs dry, or whose system develops a leak?

Here is where Motorola 2-way radio is giving aggressive dealers *instant* contact with the driver nearest the order and getting the gas delivered—fast!

Besides helping you win new customers with good service, Motorola radio does many other jobs. Drivers can get any on-the-spot instructions from the office . . . they can make their en-route check-ins by radio, saving time and eliminating toll calls. Radio brings help in a

hurry when a truck breaks down, cutting out-of-service time.

Most important, with 2-way radio you get more from each truck. LP Gas users report that Motorola radio boosts truck productivity 25%.

We have a Motorola radio specialist near you. Let him show you why more LP Gas dealers choose Motorola than any other. Inspect a Motorola unit . . . check its crisper voice quality, more sensitive receivers, lower battery drain, and the radio chassis that's built for rugged service and long life.

Financing is no problem . . . you can have Motorola 2-way radio on purchase, time payment, or lease (with or without equity). Under one plan, it's approved by the LPG Credit Corp. with only 10% down payment. Get the facts—write, wire or phone TODAY.

MOTOROLA

2-WAY RADIO

MOTOROLA COMMUNICATIONS & ELECTRONICS, INC.
A SUBSIDIARY OF MOTOROLA, INC.
4501 AUGUSTA BOULEVARD • CHICAGO 51, ILLINOIS
ROGERS MAJESTIC ELECTRONICS LTD., TORONTO, CANADA



Motorola consistently supplies more mobile and portable radio than all others combined.

Proof of acceptance, experience and quality.

The only COMPLETE radio communications service—
specialized engineering . . . product . . . customer
service . . . parts . . . installation . . .
maintenance . . . finance . . . lease.

"The best costs you less—specify Motorola."

played, with colored lights, the location of the more than 165 authorized wholesale-members of the Brunner distribution team.

Oklahomans' insurance company now in operation

The Hercules Casualty Insurance Co., a stock insurance company formed by LPG dealers in Oklahoma, recently was qualified to write insurance in the state. At the same time it issued its No. 1 policy to Henry Cannon, an Oklahoma L. P. gas dealers.

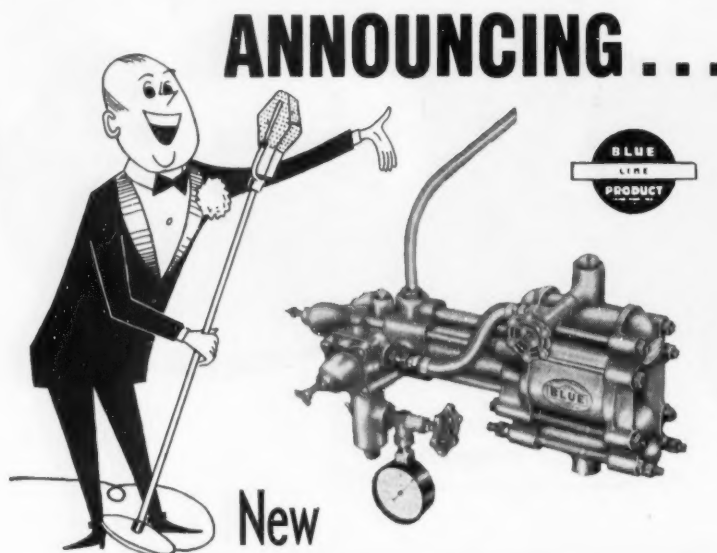
Bearing in mind the notable lack

of competition for risk covering the operations of LPG dealers, Oklahoma dealers themselves started to form their own insurance company in 1954. Their ambitions were realized in July 1955 when the necessary stock sales were over-subscribed and paid in. Stock in the company, which is currently writing all forms of casualty insurance including workmen's compensation, is limited to L. P. gas dealers. There are presently 130 stockholders.

Operations of the company are directed by John W. Williams, general manager. Officials are Jeff T. Boucher, president and chairman of the



Officials of Hercules Casualty have just presented the company's No. 1 policy to Henry Cannon. From left: Carl Williams, member of the board; Mr. Cannon; John W. Williams, general manager; and Glenn A. Springer, secretary-treasurer.



ANNOUNCING . . .

New VAPOR TRANSFER PUMP Model LP (COMPRESSOR)

An Original Concept in Transferring LP Gas

Recommended in Place of Bleeding because . . .

- ◆ The Cost is about One-Half that of An Engine-Compressor
- ◆ The Savings are 90% to 95% of Gas Normally Lost by Bleeding
- ◆ The Pump Speeds Up Transfer From 150% to 200%
- ◆ It's Easily Installed, Simple to Operate
- ◆ There's No Outside Power Required, Runs on Small Quantity of Vapor

For additional information write, wire or phone

JOHN BLUE COMPANY, INC.

HUNTSVILLE, ALABAMA

Dependable Farm Equipment Since 1886

board; Floyd Sumrall, vice president; Glenn A. Springer, secretary-treasurer; and Carl Williams, member of advisory committee. In addition to the above men, members of the board are G. O. Black, Sherman Spradling, Lewis Mitchell, Lain Garrison, and Jay and Troy Stone.

Tennessee dealer separates equipment operations

Dealers Supply Co., a subsidiary of Tennessee Liquefied Gas Co. Memphis, has been formed and will start operation soon to furnish L. P. gas equipment and supplies to dealers of the Mid-South. The company, which is to be operated by Ross Wyatt and Woodrow Trail, is to take over the lines of equipment formerly handled by Tennessee Liquefied Gas Co. on a wholesale basis.



Officers of the newly formed Dealers Supply Co., Memphis, are (from left) Jim Jones, president; Woodrow Trail, vice president; and Ross Wyatt, secretary-treasurer.

J&S Carburetor Co., Zenith Carburetor Co., John E. Mitchell Co., Hollingsworth High Compression Products Co., North Texas Tank Co., Corken Pump Co., and Temco Heater Co. are some of the firms whose products will be handled by the company.

When Butane says "HANDLE WITH CARE"

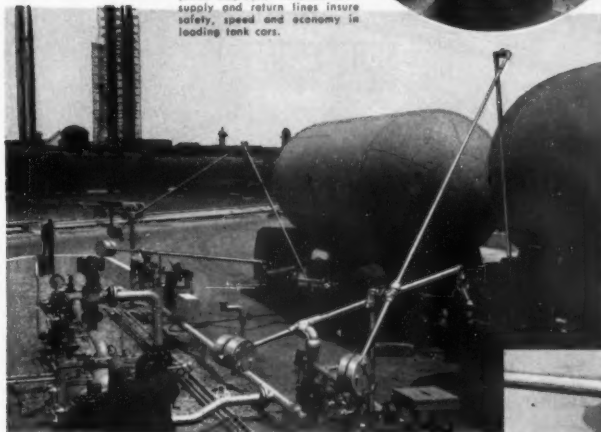
CHIKSAN ADDS SAFETY and SPEED

TO LOADING OF TANK CAR AND TRUCK



With counterbalanced Chiksan loading racks, one man can quickly and easily make connections to tank cars.

CHIKSAN low pressure swivel joints employed here on both supply and return lines insure safety, speed and economy in loading tank cars.



A typical near ground level truck loading rack using CHIKSAN joints on supply and return lines.

Close up of CHIKSAN low pressure joints on supply and return lines in truck loading of Butane.



It takes speed, safety and kid-glove handling to keep up the massive flow of liquefied petroleum gas at Standard Oil Company of California's El Segundo plant.

Chiksan provides the necessary liquid-tight, gas-tight unions, the characteristic flexibility of motion to keep the touchy Butane flowing at a swift, even pace with safety to workers, plant and community—with profit to the company.

No less than eight Chiksan Ball-Bearing Swivel Joints are needed for each loading installation to keep the gas moving into tank and truck—to provide the essential carry-off of the highly explosive vapors. And with Chiksan on the job, metal of relative low porosity takes the place of more porous and less safe rubber.

Standard Oil Company of California's El Segundo installations are typical of industry's reliance on Chiksan Ball-Bearing Swivel Joints around the world to speed the flow of enterprise—to promote production and defense—to increase safety—to protect profits.

Wherever liquid or gas must flow in industry—wherever hydraulic systems can add efficiency and economy—Chiksan Ball-Bearing Swivel Joints are on the job. If more flexibility—greater stamina—longer life and added economy are of interest to you, Chiksan's Research and Development Division can help you find a better, swifter way.

CHIKSAN



Subsidiary of FOOD MACHINERY AND CHEMICAL CORPORATION



CHIKSAN COMPANY, Brea, California • Chicago 3, Illinois • Newark 2, New Jersey • Well Equipment Mfg. Corp., (Division) Houston 1, Texas • Chiksan Export Co., Brea, California; Newark 2, New Jersey • Chiksan of Canada, Ltd., Edmonton, Alta.

Mr. Wyatt and Mr. Trail, who are well known in L. P. gas circles, have been employed by Tennessee Liquefied Gas Co. for several years and are thoroughly familiar with the products to be distributed. Trail has been in the L. P. gas industry since 1939, and Wyatt started in 1950 with Tennessee Liquefied Gas Co. Jim Jones, general manager of Tennessee Liquefied Gas Co., is president of the new company and will work closely with the managers.

It is the desire and intention of the owners of the new company to give better and faster service on the products handled than has been possible in the past. The wholesale department of Tennessee Liquefied Gas Co. started out as a sideline but has grown so much the last few years that it became necessary to separate it from the retail business.

Gulf Oil publishes L. P. gas success story

"L. P. Gas, the Cinderella Fuel" is the title of a brochure published by Gulf Oil Corp. to tell the success story of L. P. gas, whose consumption has skyrocketed upward by 27-500% in 30 years.

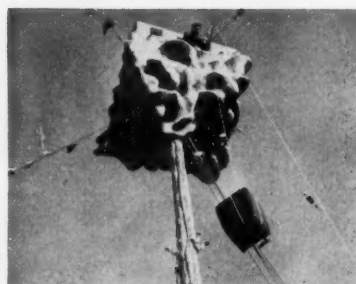
The illustrated and readable book-

let provides up-to date, layman's descriptions of an industry second only to television in growth rate. The text carries the reader through a non-technical explanation of the history, characteristics, production, transportation, and use of LPG.

Copies are available for distribution to individuals, schools, or other groups upon request to Gulf Oil Corp., Pittsburgh, Pa., which has published the brochure as a public information service.

In Sparks, Nev. LPG is up in the air

On top of a 65-ft flagpole in Sparks, Nev., "Happy" Bill Howard, world's champion flagpole sitter, is attempting to break his own record. Howard went up in the air on Aug. 4, and his contract with his sponsor, Dick Graves' Nugget Casino and Cafe in Sparks, calls for continuous occupancy of the top of the pole for 204 days. The weather was nice up there when the "sit" started, but winter always come along later in the year, and it has been known to get below zero in those parts. The contract mentions that he must be alive at the end of the 204-day period. The \$6800 payment promised for completion of the



All the comforts of home, almost, are with Flagpole Sitter Howard 65 ft up in the air. Here his Coleman heater, installed and serviced by Washoe Propane, has just about reached him. Manager Verhaal himself spent time on the flagpole installing the heater.

assignment will not be made to his estate.

As a means of promoting longevity, Howard has a neat "home" on top of the pole. It is 6-ft square, and is shaped and colored like a nugget. It includes all the comforts of home, such as TV, telephone, spring bed with mattress, cabinet for personal belongings, and a Coleman gas heater, which was installed and serviced by John Verhaal, manager of Washoe Propane Co.

To Verhaal this is just another in-

PRESSED PRODUCTS

... from our HEAD DEPARTMENT



HEADS IN STOCK READY TO SHIP

P. O. Box 5146 • Dallas, Texas • Prospect 2441

"This L-P system ASSURES us efficient gas heat REGARDLESS of plant location"



Like every Huttig plant built since 1947, this new St. Louis plant is heated by Janitrol. The L-P system is shown in photos below. Installation by Sodemann Heating & Power Co.

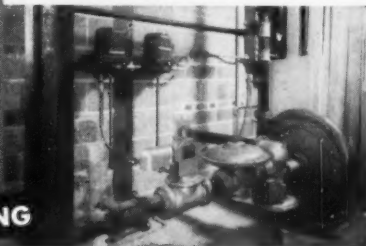
... SAYS

Mr. F. W. Stewart
Vice President-Treasurer
Huttig Sash & Door Co.



L-P SUPPLY

This battery of storage tanks supplies L-P gas for the 37 Janitrol units in the Huttig plant. Tanks and mixer installed by Skelly Oil Co.



AIR MIXING

Here propane is mixed with air to a 1375 Btu mixture, a substitute for natural gas. Mixer has capacity of 7,000,000 Btu.



UNIT HEATERS

These overhead Janitrol unit heaters in the Huttig plant area cause no interference with production or assembly activities.

Industrial executives, like Mr. Stewart, appreciate the economy and efficiency of gas heat. And for peak performance, they select Janitrol equipment!

Are you getting your share of this large industrial market?

With L-P gas, you can offer all the advantages of gas heat, regardless of restrictions! With Janitrol equipment, you can install the one line with an outstanding record of customer-satisfying performance. Ask your Janitrol representative about the opportunities in L-P gas heating for industry, schools, churches, clubs and homes.

Janitrol
HEATING AND AIR-CONDITIONING
DIVISION

Surface Combustion Corporation, Columbus 16, Ohio

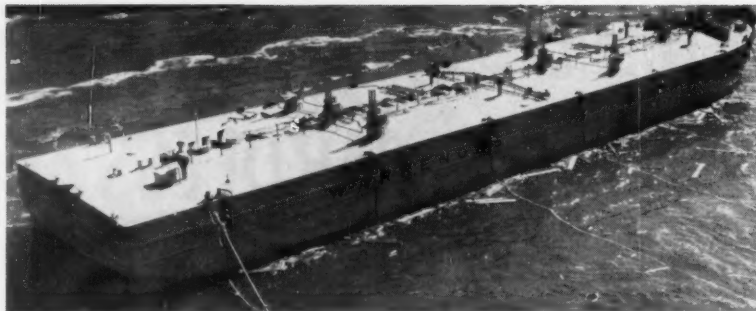
In Canada: Alvar Simpson Ltd., Toronto 13

cident in the day's work, but to Howard it is a touch of luxury while he lives without work.

Warren launches sixth LPG barge, plans seventh

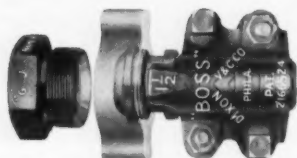
The sixth in Warren Petroleum Corp.'s growing fleet of LPG barges was launched recently in Beaumont, Texas. Christened by Mrs. James E. Allison, wife of Warren's president, the "City of Pensacola" is the third 550,000-gal. capacity barge built by Warren.

Built at Bethlehem Shipyards in



The "City of Pensacola" is shown here just after it was launched in Beaumont recently. This is the sixth LPG barge built by Warren.

*Strongest, Safest
Connections...for
All L-P Hose!*



"G J-BOSS" STYLE X-34 GROUND JOINT FEMALE COUPLINGS

Unequalled in strength, durability and safety! That's why more and more "GJ-Boss" Couplings are being used on hose handling L-P Gas . . . at bulk plants . . . on carloading rigs . . . and other installations. All parts are steel or malleable iron, thoroughly rustproofed. Furnished with super-strong "Boss" Offset and Interlocking Clamps. Ground-joint union between stem and spud forms leakproof, trouble-free seal. Sizes 1/4" to 6", inclusive. Also available in washer type, and with companion "Boss" Male Couplings. Stocked by Manufacturers and Distributors of Industrial Rubber Products.

DIXON Valve & Coupling Co.

GENERAL OFFICES & FACTORY—PHILADELPHIA 22, PA. BRANCHES—CHICAGO
BIRMINGHAM • LOS ANGELES • HOUSTON • DIXON VALVE & COUPLING CO. LTD. TORONTO
A ASSOCIATE COMPANIES—BUCK IRON COMPANY INC. QUARRYVILLE PA • PRECISION DRAWN STEEL COMPANY CAMDEN N.J.

Beaumont, the new barge is 245 ft long and 48 ft wide. It cost approximately \$600,000.

Warren's seventh barge, scheduled for completion this month, will have a capacity of 400,000. Of the three smaller barges, two have 360,000-gal. capacity and one 393,000-gal.

News Notes

Lennox Furnace Co., Marshalltown, Iowa, has changed its name to Lennox Industries Inc. The change, in name only, is being made to more clearly reflect the diversity of production now undertaken by the company.

A second store has been opened by Magic City Gas & Appliance Co. in Birmingham, Ala. The new location is at 1630 2nd Ave. North.

A new L. P. gas plant has been opened by the Farmers Co-op Association in Hays, Kan. L. P. gas sales and service are now offered by the firm, with Vern Wittman in charge of gas deliveries.

Moellenbrock & Wilke, maker of cylinder trucks for the LPG industry, is setting up extended service for distributors through the establishment of warehouse facilities at 346 E. Walnut Lane, Philadelphia. Shipments of the company's five lines of trucks can also be made direct to dealers from the factory at 204 Jefferson St., Washington, Mo.

The Lyons (Kan.) Cooperative Association has opened an L. P. gas plant and is offering delivery service in Rice county, Kan.

General Controls Co., Glendale, Calif., has moved its Kansas City, Mo. district office into new and larger facilities. The move is based on increased service to customers in the local area, Omaha and Wichita branch office territories, and to several counties in Kansas and Missouri.



You can PULL OUT of the RED with



Economy Payloader LPG Transports



From Refinery to Bulk Storage Plant you make
PROFIT-HAULS with *Economy* Blimp or Step-down Transports

The operator who demands only the finest can be sure of *profitable* performance from any of the new series, *Economy* Payloader Transports. Built of lightweight, highest tensile steel obtainable (85,000 or 105,000 psi), these new Payloaders give you bigger profit-hauls. You'll like the new Payloader's perfect balance and roadability. What's more, you'll like the *new low prices!* Yes, you can pull out of the red with *Economy* LPG Equipment! Write, phone or wire for details.

Economy FEATURES

1. Engineered and designed for perfect load distribution to comply with existing State Laws.
2. Latest ASME code and ICC construction.
3. 250-lbs. per square inch working pressure, X-ray (Perfect Weld) and Stress Relieved for Max-Payloaders.
4. Highest tensile steel obtainable (85,000 or 105,000 psi).
5. Relief valves recessed for maximum safety.
6. Rotary Gauge thermo-well recessed.
7. Newest model Reyco lightweight Tandem Unit with air or vacuum brakes.
8. Strong, equally spaced baffles to prevent surging of load.
9. ICC vapor proof lighting, standard color code wiring in copper tube and conduit.
10. Two coats of white enamel over primer... a beautiful finish.

Prompt Delivery — Most Items In Stock

**BE SURE TO GET
OUR NEW LOW PRICES!**



**FINANCING AVAILABLE
FOR APPROVED DEALERS**

DALLAS TANK COMPANY, Inc.

Quality tanks for a quarter of a century

201-5 WEST COMMERCE ST., DALLAS, TEXAS

Phone Riverside 5001

• 409 LEE ST., VICKSBURG, MISSISSIPPI

Phone 2971

“Written bid auction” locates live prospects at low cost

CONSIDER the possibilities of the “written bid auction” as a means of locating prospects for appliances or for any other gas-consuming equipment which you may want to promote intensively for a given period.

This method is particularly effective

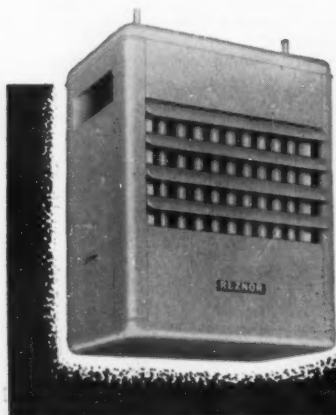
in connection with exhibits at fairs, home shows, or any other events at which home-owners gather in crowds. It can also be used as a drawing card when the dealer wishes to bring his own crowds to his place of business for a grand opening.



**still by far the best seller
because Reznor builds the
most heater for the money**

The best heater at the lowest price? No, it just isn't possible. Prices on Reznor heaters are comparable to those of the best competitive units . . . higher than those of some inferior units. But Reznor sells as many gas unit heaters as all other manufacturers combined. So the economies of mass production enable Reznor to build a better heater for the price. Wise buyers take advantage of these economies to get the most for their heater dollars by insisting on Reznor.

And the Reznor reputation and Reznor quality mean that you can sell at a price which will leave a good profit for you. For more details, see your Reznor distributor today. If he isn't listed in the yellow pages of your telephone directory, just drop us a line.



Reznor Suspended Gas Unit Heaters — 9 sizes, 25,000 to 250,000 BTU capacities — fan or blower for effective air distribution — for use with any type of gas — built-in draft diverter — aluminized steel heater exchanger.

Reznor Manufacturing Company, 4 Union Street, Mercer, Pa.

The items to be auctioned, together with their retail value and all other pertinent information should be clearly shown in the exhibit booths, show windows, and all advertising in connection with the event. Instead of the customary barker, the “written bid auction” employs cards on which the bidders enter their names, addresses, and what they are willing to pay for the article in which they are interested. The bid should be put in a locked box, which will be opened at a time and place publicly announced, in the presence of neutral judges who will determine the name of the successful bidder or bidders. The bidder does not need to be present to win.

It is good policy to offer top quality merchandise only, and it is suggested that the offerings include several items of year-round or seasonal importance. For example, an auction in connection with a county fair could very well offer ranges, water heaters, space heaters, clothes dryers, and possibly a tractor conversion. Each bid will disclose the item in which the particular prospect is interested. The unsuccessful bidders are all prospects for the sale of the items indicated. Many of them can be sold the top quality appliance or equipment, and there will be a percentage who, while they can not buy new top grade items, will be able to purchase less costly new items or good reconditioned units. In any event, new customers for gas will be secured, and probably some customers will increase their use of gas through purchase of appliances of classes which they did not previously own.

The bids prove that these prospects are willing to buy *now*. Those who did not win should be followed up as quickly as possible, before they change their minds or wander into a competitor's store.

The written bid auction is a prime method of separating the prospects from the suspects, at far less than the cost of weeding out the live ones from a general list such as is obtained from a prize drawing. The items are generally sold for prices somewhere between the dealer's cost and the retail value. There may or may not be a profit on the actual sale at auction, but the saving in the normal cost of locating live prospects adds to the profit of the company. ■

high efficiency
low investment—

Profit Getter...



TWIN BARREL UTILITY UNIT

MASTER-CRAFTED BY

COLUMBIAN

SINCE 1893

TANKS MANIFOLDED ON LIQUID and VAPOR

This time saving convenience is illustrated above. It gives you all the advantages of being able to operate from one central location. In this compact installation you have the Neptune Print-O-Meter, the Hannay manually operated hose reel (capacity up to 150 feet), and manifolding system.

The sleek, low appearance, the individual twin barrel design tell your customers that this unit represents a modern, progressive LP GAS distributor.



CUSTOM- BUILT SEMI-TRAILER

Designed and built to solve your own transportation problems. Long-experienced engineers and craftsmen combine their experience with quality materials to provide you greatest strength with lightest weight for a payload that PAYS. Maximum Capacities to meet your state limitations.



INDUSTRIAL STEEL BUILDINGS

Sound, permanent, steel buildings, easily, inexpensively erected. Pictured is 30 by 50-ft. cylinder-filling house with 10-ft. sidewalls. Ideal as pump houses, warehouses, office buildings and showrooms. Write for 16-page catalog "The Magic of Steel" fully describing sizes and uses of Columbian Industrial Steel Buildings.



Hunting for a more profitable LP delivery unit? You can't miss with this new Columbian 1,500 water gallon capacity Twin Barrel Utility Unit. At a minimum investment you have top operational efficiency—all service accessories of full skirted units. Best of all the lower center of gravity of the twin tanks provides the better load distribution, better balance that pays off in longer truck life.

Extra strength and durability are assured by Columbian's 61 years of experience in master-crafting steel products. Fittings and accessories are engineered into the unit for maximum efficiency. The double door cabinet in the rear houses meter... valves are covered by open hoods... pump is mounted on channel hanger with direct-drive power take-off for quick transfer. Hose racks each side (optional) for 50' lengths up to 1½" diameter. Fully equipped with ICC lights and wiring.

Write today for complete, illustrated literature!

COLUMBIAN Steel Tank Co.

P. O. BOX 4048-C

KANSAS CITY, MO.

STEEL, Master-Crafted by Columbian... First for Lasting Strength

HERE'S BEST REGULATOR HOOK-UP FOR MULTIPLE UNITS

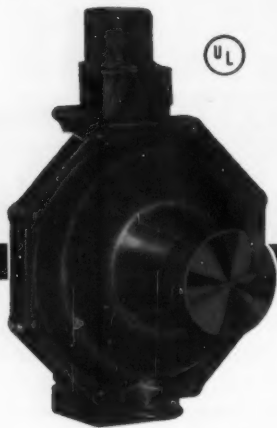
sel-pac

**Low Cost and Most Efficient
All Weather Installation**



MODEL D-1600 HP1

Sel-Pac D-1600 HP1 high pressure regulator with a capacity in excess of 2,500,000 BTU is painted red to indicate high pressure. This high pressure regulator has a large diaphragm with a linkage mechanism of $4\frac{1}{2}$ to 1 resulting in a very low lock-up pressure which is not to be found in SMALL high pressure regulators. (Send for bulletin mentioned below).



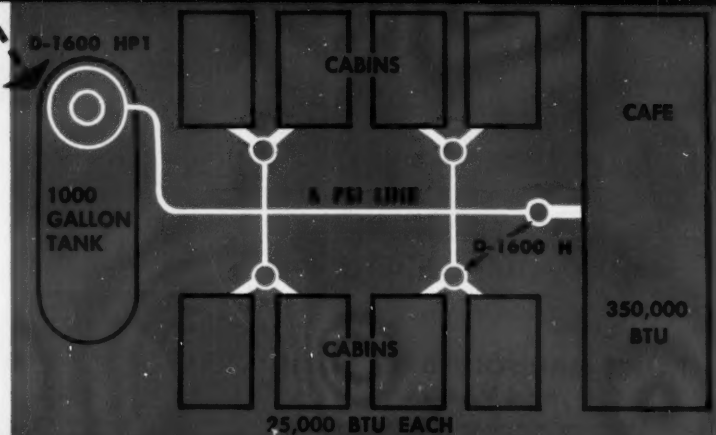
MODEL D-1600 H

This Sel-Pac low pressure regulator, Model D-1600 H will exceed 500,000 BTU with an inlet pressure of approximately 10 PSI. It features an extra large valve seat and is designed internally to reduce or prevent field failures due to freeze-ups, dirty gas, etc. It is painted black to aid heat absorption. One-half inch female pipe inlet connection permits use of copper or pipe with minimum joints and fittings. Standardize on this unit and use it in conjunction with the high pressure Sel-Pac shown above for the most efficient, most economical two stage hook-up.

A comparative test of Sel-Pac regulators will definitely prove their superiority to anything in the LP-Gas Industry today. Check for capacity, low lock-up pressure and easy flow anti-freeze characteristics.

Incorporates large easy to get at gas passage-ways and husky wrench pads at inlet and outlet. Use both the Sel-Pac D-1600 HP1 and the D-1600 H to achieve the best balance in your two stage system.

Send For
FREE
Booklet on
Regulations
and Piping



TWO STAGE SYSTEM

When you carry in stock the Sel-Pac D-1600 HP1 high pressure regulator with the red body, and Sel-Pac Model D-1600 H low pressure regulator with the black body you can handle almost any LP-Gas installation that comes along. From single domestic dwellings to multiple commercial units, these two regulators are the most universally adaptable in the industry today. They are designed for a set of conditions similar to those shown above wherein the high pressure unit, with a capacity of 2,500,000 BTU will handle a very large installation. With the D-1600 HP1 regulator the gas outlet pressure is reduced to 5-10 PSI and carried through a small line to individual Sel-Pac regulators Model D-1600 H. This permits one low pressure regulator to serve several outlets and give maximum efficiency with minimum piping cost.

Send for the Sel-Pac catalog giving a complete treatise on regulator hook-ups, piping sizes, etc. Our Engineering and Sales Departments are at your service and will promptly reply to any inquiries you may have.



Selwyn-Pacific Company

340 West Avenue 26 • Los Angeles 31, California • Capital 5-1555



BUTANE-PROPANE News



THE MODERN TWO STAGE SYSTEM

by **GEORGE R. POSTLEWAIT**
President
SELWYN-PACIFIC COMPANY

Single stage regulation which was practically all we knew a few years back cannot be compared with the many advantages of the MODERN two stage system.

Let's examine for a moment the high pressure side of the two stage system because here is the most critical part of two stage regulation. As we all know there are two principal types of high pressure regulators sold for use with the two stage system. One type is of small diameter and the other is a large diameter regulator. The Sel-Pac is the large diameter type known as the 1600 HP1, which we strongly urge all LP-Gas men to select in the interest of reducing field service calls and increasing overall economy.

The LP-Gas dealer today need not be satisfied with a small diaphragm first stage regulator. A small diameter regulator on the high pressure side has only a very limited capacity compared to a large diameter unit. The small diameter regulator has no linkage mechanism to insure low lock-up, therefore, high lock-ups frequently occur causing recondensation or liquefaction of the gas in the line between the high pressure and the low pressure regulator under very cold operating conditions permitting liquid to hit the second stage regulator.

Recondensation means liquid in the line feeding the final stage regulators. NO final stage regulator can control liquid due to the fact that the volume expands approximately 275 times in changing to vapor from liquid.

In the Sel-Pac high pressure regulator the combination of the large diaphragm and the mechanical advantages gained by the linkage mechanism gives a lock-up pressure of only a fraction of a pound under the actual flow pressure, thus eliminating costly service calls, dissatisfied customers, etc.

Furthermore, the "straight through flow" in the 1600 HP as opposed to the "90° up hill flow" of small high pressure regulators eliminates moisture traps and their resulting freeze up problems.

A large diameter linkage regulator such as our 1600 HP permits pressure settings as low as 5 PSI with lock-ups of less than 6 PSI and for loads even exceeding 2 million BTU. This means that it would require line temperatures of 30° below zero before recondensation would become a problem whereas a small diameter high pressure regulator which would handle only half this volume may have to be set at 10 PSI or higher with resulting lock-ups, possibly reaching 18 to 20 PSI. This means trouble with possible recondensation problems in ordinary zero degree winter weather.

We will gladly send without charge our bulletin and piping diagram on two stage regulation.

SELWYN-PACIFIC COMPANY
340 West Avenue 26
Los Angeles 31, California

CALENDAR

Coming events
in the Industry

1956

January 4—New York LPGA annual convention, DeWitt Clinton hotel, Albany.

Jan. 15-16—Arkansas LP Gas Association Annual Mid-Year Meeting —Hotel LaFayette, Little Rock.

Jan. 16-18—Fifth District L. P. Gas Conversion School —Kansas State College, Manhattan, Kan.

January 19-26—National Housewares & Home Appliance Manufacturers Exhibits, Navy Pier, Chicago.

Jan. 30-31—Michigan Liquefied Petroleum Gas Association Convention—Hotel Statler, Detroit.

February 16-19 — Eastern Canadian LPGA Convention — Mount Royal Hotel, Montreal, Quebec.

February 28-29-March 1—LPGA District convention and Trade show, Sheraton-Park hotel, Washington, D. C.

March 26-28 — Southeastern District LPGA convention and trade show, Atlanta-Baltimore hotel, Atlanta.

April 5—GAMA 7th Annual Atomic Gas Range conference, Hotel Pierre, New York City.

April 6-7—Northwest District LPGA Annual Convention — Multnomah Hotel, Portland, Oregon.

April 23-25—Association of Nebraska LPG Dealers, annual state convention, Fontenelle hotel, Omaha.

April 28—Nevada Liquefied Gas Dealers Spring Meeting, Ely, Nev.

May 6-9—LPGA 25th annual convention and trade show, Conrad Hilton hotel, Chicago.

June 10-12—Arkansas LP Gas Association Annual Convention — Arlington Hotel, Hot Springs, Ark.

All associations are invited to send in dates of their forthcoming meetings for this calendar.

ROLL IT ON AIR!

Made by the pioneer manufacturers . . . and the largest manufacturers . . . of LP cylinder trucks, M/W smooth-rolling hand trucks are today helping to streamline deliveries for LP gas and appliance dealers the country over.



MODEL 7325 (shown)

Standard Cylinder Truck available with 10 x 2.75 tires in two types.

Air Tires **\$24.25**
Semi-pneumatic **18.60**

MODEL 7325-G

Equipped with 10 x 3.50 General tires having separate inner tubes. A popular model **\$27.90**



MODEL 900 — Designed for safe, smooth, easy handling of gas cylinders up to 30" in diameter and weighing up to 1000 lbs. Roller bearing wheels; 12" pneumatic tires **\$50.00**

SEND FOR FREE CATALOG

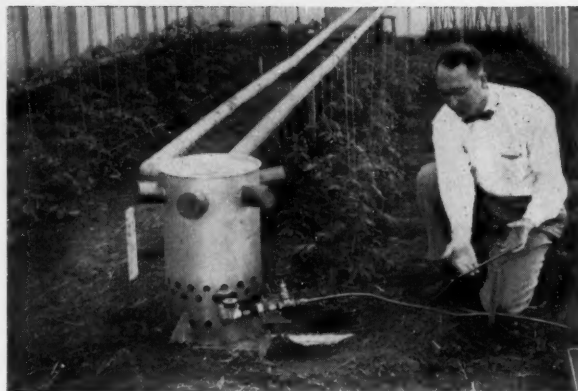
Moellenbrock & Wilke
WASHINGTON, MO.

Propane heats low cost experimental hothouse

WOULD you like to pick fresh ripe strawberries and tomatoes from your own back yard at Christmas? In this miracle age of plastics and propane it might be nearer than you think.

Scientists at Purdue University have been working to create a low cost greenhouse, practical for in-

Thermostatically controlled tobacco curer brings tomato blooms in March in Purdue experiment.

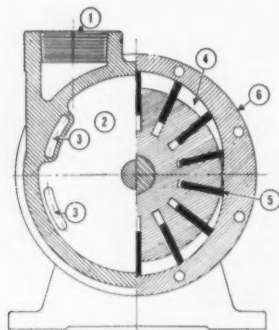


NEEDS NO VAPOR-RETURN LINE



Fills Customer-Tanks Faster

Experience has shown that the Superior Precision Rotary Pump, which is scientifically designed to handle LP-Gas and NH_3 , enables dealers to serve more customers per day at a lower cost. This efficient pump needs no vapor-return line. It is capable of high volume at lower pump and engine speeds—regardless of differential pressures up to 300 P.S.I. Up to 200 P.S.I., the higher the differential pressure, the greater the efficiency. Pump speeds up to 500 R.P.M. produce maximum volume.



SECTIONAL END VIEW

1. Case 2. Manifold
3. Suction and Discharge Ports
4. Rotor 5. Vanes 6. Cam

**INQUIRIES INVITED
FROM DISTRIBUTORS**

Superior L P G PRECISION ROTARY PUMP

This compact light-weight pump has a two-lobed cam, with double pumping cycle for each revolution. Within the rotor are 14 hydrostatically-balanced, pressure-activated, self-adjusting and self-lubricating carbon vanes that provide positive pumping action. . . . No metal-to-metal contact; no wear, except on the carbon vanes which can easily be replaced. The base fits the average truck mounting without need for change in piping. Available in 60 and 100 G.P.M. sizes.

Write for Descriptive Folder
and Name of Nearest Distributor

SUPERIOR INDUSTRIES, INC.

1014 Pere Marquette Building

New Orleans 12, La.

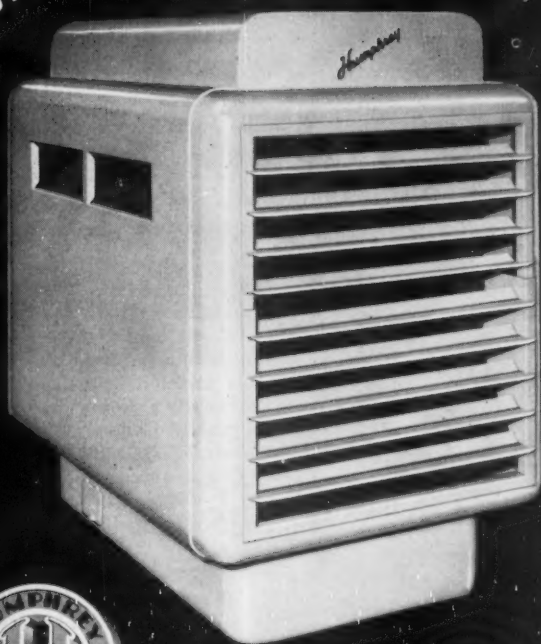
dividual back yard use, that bids fair to enable home gardeners to harvest their favorite vegetables, small fruits and flowers at any season of the year.

Their experimental model, somewhat larger than the average suburbanite will need, is of simple design and can be built by any do-it-yourself addict who can handle simple carpentry. It consists of a wooden framework of 2 x 2's and 2 x 4's with nailed and glued gussets to convert the rafters into trusses. Over this is stretched an inexpensive polyethylene cover—same material as the fruit, vegetable and poultry bags that you see every day in the local market. This plastic cover is not nearly as fragile as might be imagined. It will withstand wind, hail, rain and snow. If damaged it can be patched or replaced at low cost.

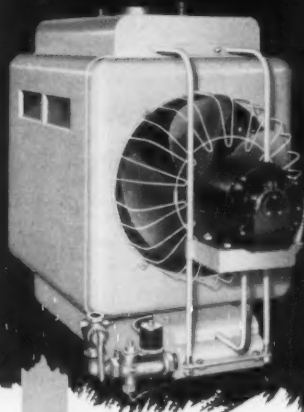
Purdue's experimental greenhouse is heated by two propane gas heaters—standard Kur-Mor tobacco curers—with four of the outlets capped and the remaining two connected to 3-in. flues which run the length of the greenhouse, distributing the heat and serving as vents. Constant temperature is maintained by means of a thermostat mounted at plant level. Ventilation is provided by means of transom windows under the eaves and in the gables. These are equipped with plastic film.

If this type of greenhouse is as practical as early experience indicates, it may enable northern market gardeners and farmers to produce crops that grow from started plants to produce their own seedlings without the heavy investment required for glass greenhouses. ■

SUPERIOR ENGINEERING PAYS OFF IN....



Humphrey AUTOMATIC GAS UNIT HEATERS



These Humphrey over-head units provide the most satisfactory heating service ever developed for every kind of commercial and industrial installation. They are highly efficient, require a minimum of attention, and have a very long service life. They are good-looking, too . . . styled and finished to harmonize with all surroundings.

Study the superior engineering features of Humphrey Gas Unit Heaters. We're sure you will agree that Humphreys would be a wise choice for your next job.

FREE ENGINEERING BULLETIN

Write today for this valuable Manual. Contains full specifications of Humphrey Automatic Gas Unit Heaters, both propeller and rotor types, and full instructions for installation. Ask for your copy now. It's free!



7 HUMPHREY IMPROVEMENTS

Free-Flow Heat Exchanger — No baffles to impede air circulation. No tubes to clean.

Tilting Front — Directs warmth downward to floor level without reducing warm air volume.

Stainless Steel Burner Tips — New lifetime burner of highly efficient, dual-flame design.

Non-clogging Stainless Steel Pilot — Highly dependable, even in dusty atmosphere.

Quiet, Durable Fan Motor — Heavy duty type motor, rubber mounted for quietness.

Positive Safety Controls — Including safety shut-off and overload control . . . standard equipment.

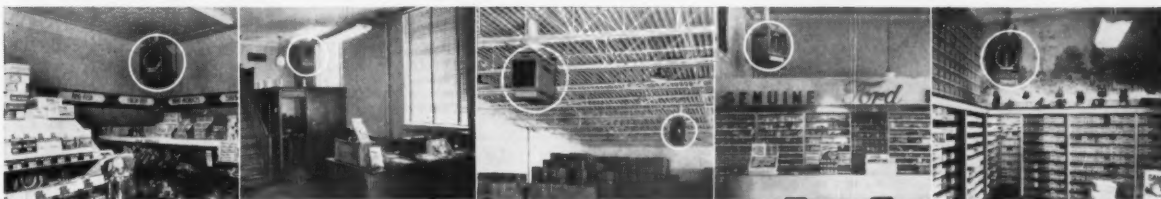
Handsome Appearance — Modern "streamline" design, with rich, dust-resisting Ivory baked enamel finish.

GENERAL GAS LIGHT COMPANY

23 Warren St.
New York

KALAMAZOO, MICHIGAN

225 Eleventh St.
San Francisco



Coming ...
The Seal of Service
for
LPG Systems



**• SUPERIOR •
TANK •
• CORPORATION •**

DOMESTIC - INDUSTRIAL - FARM

Thirty-five years of LPG experience, as dealers and as manufacturers, combines to bring you the complete tank service you have needed. Nearing completion is our big plant with every modern facility to serve dealers from Kentucky to the Keys—from the Mississippi to the Atlantic.

Every SUPERIOR tank, every fitting will more than meet NBFU specifications. You can now offer your customers

a system built to individual needs... with all the features of quality and safety... *plus service!*

Whether you need one tank or a truckload... a tractor tank, domestic tank or a complete industrial system, SUPERIOR engineering know-how combined with a sympathetic understanding of your problems means you can do a better, quicker, more profitable job. Call or write for information.

SUPERIOR
TANK CORPORATION

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4846 Lawrenceville Hwy
Tucker, Georgia

**Keep Up with L. P. gas
Developments Each Month**

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BUTANE-PROPANE
News



associations

Midwesterners gather for management institute

Six midwestern states and representatives of 19 L. P. gas distributors joined recently for the first Midwest L. P. gas management institute held on the University of Wisconsin campus under the sponsorship of the university's extension division, the School of Commerce, and the Wisconsin L. P. Gas Association.

One of the principal speakers was L. T. White, director of business management of the Cities Service Management Corp., New York. His subject was merchandising sales.

Other topics and speakers included Prof. Dick Sullivan, chairman of the extension school's department of commerce, "Management's Responsibilities"; Prof. Harold DeBaun, department of commerce, "Cost Records"; Prof. Pat Doyle, Industrial Management Institute, "Training Employees"; Harold S. Day, Wisconsin Telephone Co., "Customer Relations"; Prof. Phil Fox, "Business Ethics"; Prof. Brad Boyd, "Improving Employee Morale"; Bert Whittwer, Wolff Kubly & Hirsig, "Collections."

Record budget approved for '56 LPGA financing

LPGA directors approved a record budget of \$465,000 to finance association operations for 1956 during their meeting last month in Washington, D. C.

It was presented to the board of directors by the finance committee which had met earlier under the chairmanship of Mark Anton, Suburban Propane Gas Corp., to draft the figures.

The directors acted on approximately 30 items during a fast-paced one-day session. President McAllister presided.

One urgent item was approval of the transportation committee's plea for an immediate request to the Interstate Commerce Commission for an extension of the time for making hydrostatic tests of L. P. gas tank cars. The committee reported that



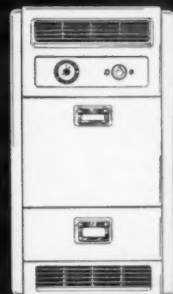
Full-Size 36" Model. Striking range with new, advanced luxury features available.



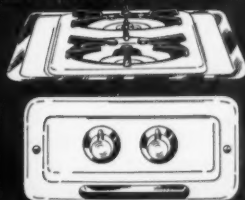
Space-Saving 30" Model. Boasts mammoth 24" oven, beautiful AstraGlo backguard.



20" Apartment Model. Now with high-style design, AstraGlo backguard.



Fabulous New Hardwick Built-Ins. Oven and counter-top units outstanding for popular price, ease of installation, beautiful appearance. White, Copper-tone or Stainless finish.



now! a high style Hardwick to sell every prospect

Here are the glamorous new 1956 Hardwick Gas Ranges—a full line of high styled ranges to sell every prospect. The '56 Hardwick: styled by America's top designers, built to high Hardwick standards, and promoted to make your selling job easy. Hardwick ranges offer the world's finest cooking performance, and are the fastest-selling popular priced ranges on the market today. Display Hardwick models in all sizes . . . see how Hardwick's combination of beauty, top performance, and popular price help you sell more ranges.

ADVERTISED IN FULL COLOR IN

Ladies'
Home Journal

•
McCall's

•
Better Homes
& Gardens

•
House
Beautiful

SEE HARDWICK FOR '56

HARDWICK STOVE COMPANY, CLEVELAND, TENN.



unless ICC gave car owners more time for the tests many cars would have to be taken out of service during the critical winter heating season.

The silver anniversary trade show is approaching a sell-out of its booth space, Convention Committee Chairman C. O. Russell, Rapid-Thermogas Co., told the board. More than 230 display spaces have been sold.

The association's newest member service project—group insurance—has gotten off to a running start, Insurance Chairman R. E. Maloney stated.

The board approved nomination of Jack Coughlin, Westland Oil Co., Minnot, N. D., as chairman of the marketers section.

Starting in January 1957 all range top burner sections and ovens must carry automatic ignition, Appliance Specifications Chairman W. J. Malchiodi, Protane Corp., told the meeting. Standing pilots may be used where the flames would be visible. Automatic pilots are to be used for ovens.

The directors all asked for further study of a plan to change location of offices serving New England and East

Central districts; tabled for further study a plan to conduct a cost-of-doing-business survey; approved a suggestion to the National Council for LP-Gas Promotion that it consider revising its dues structure; accepted 77 new members; and approved local target area committees serving as links with local civil defense units.

The next board session will be May 6 during the annual convention at the Conrad Hilton hotel, Chicago.

West Coast LPGA moves into San Francisco office

West Coast LPGA directors Paul M. Shannon and C. M. Ambrose Jr. announced that the association has acquired new office quarters for their West Coast district office. The office is now located in the Western Merchandise Mart, 1355 Market St., San Francisco 3, Calif., in Room 457.

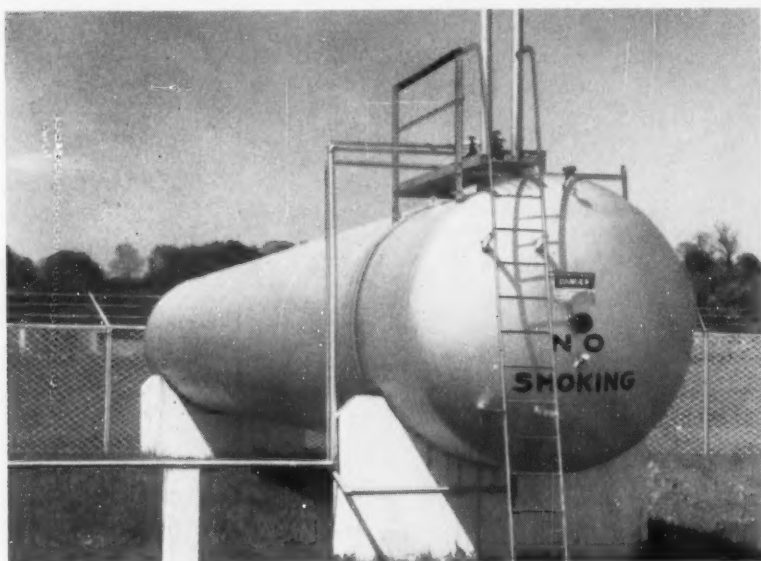
The directors, in making this announcement, point out that because of the increased activity and expanding membership on the West Coast, a larger and more centralized location was required. The office was formerly located in San Carlos, Calif. Naomi Garrigues has been added to the staff. M. A. Ennis continues as West Coast secretary.

Minnesota dealers praise seminar-like convention

What is described as the best convention the Minnesota Petroleum Gas Association "ever had" took seminar form recently in Minneapolis.

Five leading industry men and educators conducted classroom conferences where the 204 delegates to the MPGGA convention heard ways to improve their business. Each member in attendance was given an opportunity to attend any or all of the conferences. Members were divided into five groups and each "counselor" held five separate conferences on the subject assigned to him. The seminars covered cost factors, public relations, advertising, gas vs. electric cooking, and hiring and training. Cost factors involved in operating an L. P. gas business—gas delivery routing, service call routing, truck operating costs, and shrinkage and temperature correction — were handled by Instructor Tom Ennett, Rockford (Ill.) Propane Co. and a graduate in industrial administration from the University of Illinois.

Better public relations through service, covering LPG delivery men vs. customers, adequate sizing (gas storage and line capacity), outages



Seven reasons why Bulk Plant Operators choose storage tanks by Downingtown

1. Extra strength to resist the ravages of time—extra durability to keep your maintenance costs low year after year.
2. Extra-strong welds—X-ray controlled for soundness and uniformity.
3. Extra-smooth welds for a neater appearing installation at your plant.
4. Designed and tested to meet all requirements of ASME, API and NBFU.

5. Furnished with smooth-working first-quality valves and fittings when ordered.
6. Foundation drawings supplied with tanks.
7. Capacities from 4,000 to 30,000 gallons (W.C.).

Write for detailed specifications on safe, low-cost Downingtown storage tanks for LP-gas or anhydrous ammonia.



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Sales Offices: 1487 S. 66th St., Milwaukee 14
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Division of **PRESSED STEEL TANK COMPANY**
Milwaukee 14, Wisconsin • Manufacturer of Hackney Products

LP-GAS CONTAINERS FROM ONE POUND TO 30,000 GALLONS



let us take the burden off your back...

Loaded down by the financial problem involved in acquiring cylinders? We can lighten that burden! Let us provide you with 100 lb. cylinders complete with valves on a long term lease basis—freight prepaid in carload lots.

- You pay **only one small annual lease fee** . . . no other charges.
- You have **an option to purchase cylinders** at depreciated value any time during life of the lease contract.
- You **conserve working capital** for bulk plant expansion, acquisition of new customers, rolling stock, receivables, inventories and other current needs.

Wire, write or telephone today for complete details.

LPG

LEASING CORPORATION

306 EAST 131ST STREET • CLEVELAND 8, OHIO

and how to correct them, and realistic gas delivery and pickup service, was conducted by Robert Lisk, assistant sales manager of Fisher Governor Co., Marshalltown, Iowa.

W. J. Malchiodi, general sales manager, Protane Corp., Cleveland, Ohio, was instructor for the L. P. gas advertising and promotion conference. His subjects included budgeting advertising funds, methods and purposes of advertising, and an analysis of advertising benefits.

The fourth seminar covered L. P. gas vs. electric cooking and was conducted by Frank Henke, sales man-



Addressing the 204 delegates to the Minnesota meeting is E. A. Dovenberg, newly elected president of the group. At left is G. F. Bursinger, retiring president. J. E. Mulherin, newly elected secretary, is at right.

Butane Propane

Carter

A name associated with the oil industry since Sisterville, West Virginia, in 1893 . . . over 60 years of experience.

CARTER'S reputation for dependability, which has been earned during these years, is yours when you buy LP gas from Carter.

Call CARTER when you need Butane or Propane — for domestic or industrial purposes — and you call an unexcelled supplier, with unexcelled products.

THE CARTER OIL COMPANY
TULSA, OKLAHOMA

ager of Harper-Wyman Co., Chicago.

John Nesser, sales manager of Delta Tank Manufacturing Co., Baton Rouge, La., presided at the hiring and training conference where he discussed who to hire, whether to fit the job to the man or the man to the job, and how employee training can help the boss.

Aside from the busy schedule of "classes," MPGA members found time to elect E. A. Dovenberg, Home Gas Co., Minneapolis, president; Ed Koplin, Economy Gas Co., Litchfield, 1st vice president; R. C. Schuetman, Skelgas Co., St. Paul, 2nd vice president; and J. E. Mulherin, Shell Oil Co., Minneapolis, secretary.

Promotion council reelects officers, name new members

All officers of the National Council for LP-Gas Promotion were reelected at the group's recent annual meeting; Kenneth R. D. Wolfe, Fisher Governor Co., president; A. H. Cote, Suburban Propane Gas Corp., Whippany, N. J., chairman of the executive committee; and Harry Morley, FauceHot Heater Co., LaPorte, Ind., treasurer.

Carl W. Harris was appointed to the new position of managing director of the council and George J. Schulte Jr. was named director of managing director of the council and George J. Schulte Jr. was named director of the LP-Gas Information Service.

Promotional plans for the LPG industry, including a \$250,000 advertising campaign and a \$50,000 public relations program, were discussed and approved by the group representing marketers, producers and manufacturers.

Five appointees from the LPGA and two from GAMA have been an-

RED BRUMIT SAYS

Let's be Basic...



3 essentials
MATERIAL
MEN
KNOW-HOW } **A Good Product**

It takes all three of these to produce *any* kind of product... BUT the quality of the product depends on the degree of quality of each of the three ingredients. The best MATERIAL, which we use, of course, is available to all who would pay its price. MANPOWER is also available to all. Yet our manpower is trained for our specific problems... schooled to the point of real craftsmanship. KNOW-HOW, real know-how, cannot be bought. It is acquired mostly through years of experience. The know-how at Dal-Worth is backed by 32 years' successful experience.



There is the same advanced styling and engineering for service and economy in all our propane-butane and anhydrous ammonia tanks, such as this 1200 - 2000-gallon delivery unit with equipment installed to meet any state's specifications, or the...

You can bring ALL your tank needs to Dal-Worth in complete confidence knowing that they will receive the best in each of these basic ingredients. QUALITY MATERIALS... REAL CRAFTSMANSHIP... and KNOW-HOW BACKED BY YEARS OF EXPERIENCE.

DAL-WORTH
TANK COMPANY

W. G. (RED) BRUMIT, OWNER



Space-Mizer LP Gas Dispenser; 1000, 2000 or 3000 WG capacity; completely self-contained with choice of equipment and colors. This is the ideal unit for service stations, fleet operators and LP gas dealers.

A KNOW-HOW BACKED BY 32 YEARS OF EXPERIENCE

BOX 818

GRAND PRAIRIE, TEXAS

nounced as new members of the council.

GAMA also appointed Council Member A. B. Cameron, Ruud Manufacturing Co., as new chairman of the manufacturers section. He will serve as vice president of the council on the executive committee. LPGA also advanced Talmadge Lovelady, Pure Gas Service Co., Worland, Wyo., to the executive committee of the industry promotion group.

New council members from LPGA are F. T. Carpenter, United Petroleum Gas Co., Minneapolis; Forrest Fram, Fram Heating Inc., Chagrin



A. B. Cameron



F. T. Carpenter



Forrest Fram



W. F. Rockwell, Jr.

Falls, Ohio; George D. Hammond, Rural Gas Service Inc., Westfield, Mass.; George B. McClellan, William

Wallace Co., Belmont, Calif.; and T. V. Scott, Weatherhead Co., Cleveland, Ohio.

New GAMA members are W. F. Rockwell Jr., Rockwell Manufacturing Co., Pittsburgh, and Richard S. Testut, Servel Inc., Evansville, Ind. Reappointed by GAMA were Lee Brand, Empire Stove Co., Belleville, Ill.; C. L. Burrows, Coleman Co., Wichita; and A. B. Ritzenthaler, Tappan Stove Co., Mansfield, Ohio.

VIKING LP-GAS PUMP SALES JUMP

ANOTHER **47%** IN 1955

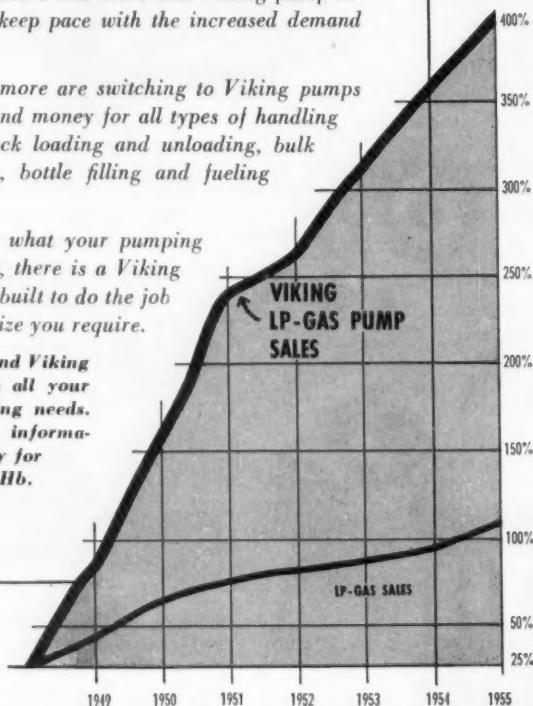
There's a mighty good reason why Viking LP-gas pump sales jump far ahead each year.

1. There are more and more new Viking pump installations to keep pace with the increased demand for L-P-gas.

2. More and more are switching to Viking pumps to save time and money for all types of handling . . . from truck loading and unloading, bulk plant transfer, bottle filling and fueling purposes.

3. No matter what your pumping needs may be, there is a Viking LP-gas pump built to do the job better in the size you require.

You too will find Viking the answer to all your LP-gas pumping needs. For complete information, ask today for catalog series Hb.



VIKING PUMP COMPANY

Cedar Falls, Iowa, U.S.A. In Canada, it's "ROTO-KING" pumps
See our catalog in BUTANE-PROPANE CATALOG

Nevada LPG dealers elect Marold at annual meeting

Robert Marold, Valley Propane Gas Co., Sparks, Nev., was elected president of the Nevada Liquefied Gas Dealers Association at the group's 5th annual fall meeting and trade show, held recently in Reno.

Serving with Mr. Marold will be Robert Bohen, Las Vegas (Nev.) Gas Co., vice president, and Keith Horning, Nevada Gas Service, Winnemucca, secretary and treasurer.

During the meeting, which was attended by 150, the newly incorporated association appointed committees to study legislation, safety, and insurance.

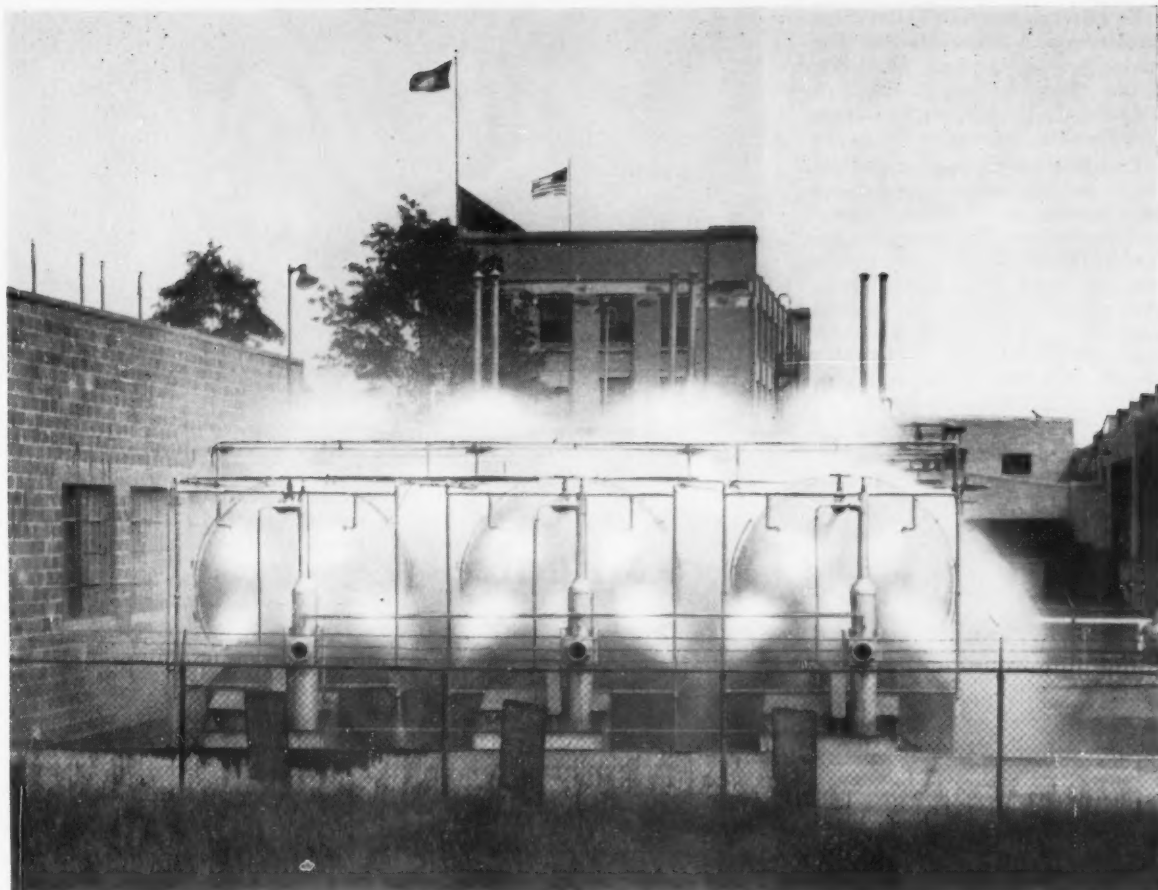
Earl Hanna new prexy of Mississippi group

The annual fall meeting of the Mississippi L. P. Gas Dealers Association, held at the Edwards Hotel in Jackson, drew nearly 100 dealers, suppliers and guests.

Earl Hanna, Sandifer Butane Gas Co., Jackson, who has filled many important committee assignments and is a past vice president of the association, was elected president for the current year, succeeding Jack Grundfest of Cary.

Other officers elected were: Mack Stone, Tunica (northern district); W. W. Gresham Jr., Indianola (central district); and Howard Watts, Hattiesburg, (southern district vice presidents); Robert A. Weir Jr., Newton, secretary-treasurer.

Mr. Grundfest made the following committee appointments: resolutions



Protecting LP-Gas tanks against exposure fires

LP-gas is a wonderfully compact source of heat and energy ready to do a hundred useful jobs in the community. But because of this concentration of energy, LP-gas tanks must be protected from exposures to high heat from outside sources. A Grinnell ProtectoSpray system provides such protection.

The drenching water blanket provides instant cooling, to reduce internal tank pressures and to prevent rupture.

In addition, positive air turbulence is created, even in still air, to help dilution of any leaking gas by the

inert gases present in the air. Water-vapor dilution assists in thinning out gas-air mixtures toward the point where they will no longer burn. And fire, if it should occur, is localized, permitting safe disposal of the gas by burning where it escapes, thus reducing the fire explosion hazards downwind or downgrade.

There is a Grinnell Fire Protection System for every fire hazard. Call on Grinnell for advice about the one best suited to your needs. Grinnell Company, Inc., 272 West Exchange Street, Providence, R. I.



GRINNELL
PROTECTOSPRAY SYSTEM



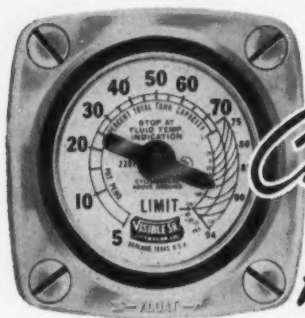
—Manufacturing, Engineering, and Installation of Fire Protection Systems Since 1870—

—Earl Hanna, Jackson; Walter Jones, Inverness and Curlee Boone, Grenada. Nominating—John Grice, Picayune, chairman; T. G. McRae, P. A. Johnson, Carl Hammond, F. O. James and Frank L. Stevens.

Engaging the attention of the dealers at the first session was a discussion relating to "Premium Stamps and the Dealer." The discussion was lead by W. W. Gresham Sr., Indianola, and Ralph Pendergraft, prominent gasoline distributor of Jackson. The consensus of the discussion seemed to indicate that dealers should steer clear of any such plan.



Newly elected officers of the Mississippi LP Gas Dealers Association are (from left) W. W. Gresham Jr., vice president, central district; Earl Hanna, president; Robert A. Weir Jr., secretary-treasurer; and Mack Stone, vice president, northern district. Not shown is Howard Watts, vice president, southern district.



**There's Real
Character
Behind This
honest face!**

The Float Gauge face you see here is covered with a clear plexiglas crystal and sealed against moisture. The pointer is Alnico magnet with an Alnico magnetic drive.

And the "inside" you don't see is the sturdy steel float which withstands collapse tests over 1000 lbs. per square inch.

Float rod is cast into gear and counterweight assembly. Made of spring steel for deflection without banding, the rod extends through the float for maximum rigidity.

A one-piece gear features shrouded teeth on a stainless steel bearing. Tubing and drive shaft are of corrosion resistant aluminum alloy.

These are only a few points of the fine character reflected on VISIBLE'S honest face!

BEST... BECAUSE IT'S...

PRECISION MADE
VISIBLE
MAGNETIC

FLOAT GAUGES FOR LP-GAS & ANHYDROUS AMMONIA



1213 S. AKARD, DALLAS
MEEDER EQUIP. CO.
1745 N. EASTERN, LOS ANGELES 32

2545 SUMMER, MEMPHIS
ODELL GLASS CO.
1277 HARDEE ST., N. E., ATLANTA

The morning session was concluded with committee reports.

Following the luncheon, the association heard an excellent and interesting talk by Sen. Earl Evans Jr., of Canton, who discussed the new state budget and future financial requirements of the state. He gave the dealers a clear insight into the cost of government and an idea what may be expected when the 1956 regular session of the legislature convenes in Jackson in January.

Featured speaker for the afternoon session was Richard J. Dorman, director, Liquefied Compressed Gas Division, Office of Motor Vehicle Comptroller, who discussed "The Liquefied Petroleum Gas Industry in Mississippi."

The afternoon session was concluded with the report of the nominating committee and the resolutions committee.

Traffic clinics held by western LPG association

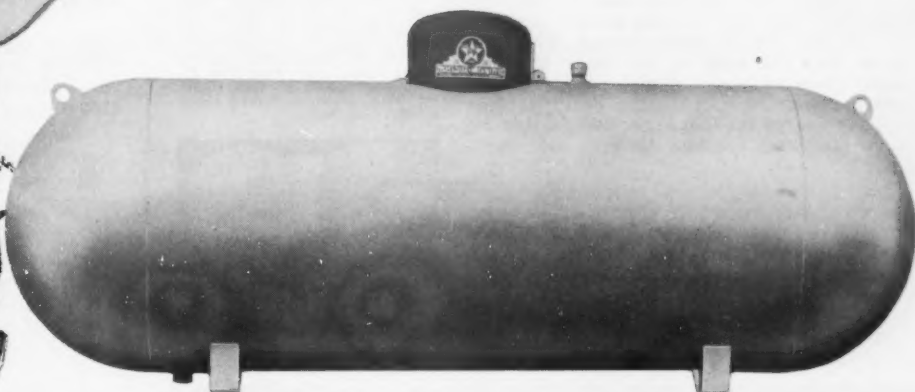
Traffic safety clinics have been held jointly by the Western Liquid Gas Association and the California State Highway Patrol in 11 California cities, for the benefit of LPG industry members. The mobile safety education unit of the highway patrol, complete with specially trained officers, was assigned for the series of meetings, which drew an average attendance of 40.

Various testing devices were used to measure the efficiency of vehicle operators, and information was given for the correction of the deficiencies









BUTANE-PROPANE News



You'll be a lot happier
with a Texas
RED BONNET
LP-G System



**ALL THESE EXTRA FEATURES ARE
IN THE RED BONNET SYSTEMS**

-  Approved by Underwriters Laboratories.
-  Liquid line with excess flow on all above ground systems 250 W.G. and larger.
-  Tanks are automatically welded with a double bead.
-  Constructed of high tensile steel for extra strength.
-  Painted high gloss aluminum or white enamel over rust resistant automotive type primer.
-  Bottom liquid outlet on all above ground systems.
-  Vapor Return Valve on all Systems for easy filling.
-  Regulator has ample capacity to accommodate all needs.

WRITE FOR SPECIFICATIONS AND QUOTATIONS

TEXAS BOILER & MACHINERY CO.

3215-17 HICKORY STREET

• DALLAS, TEXAS

• TELEPHONE HA 1-7111



TRUCK TANKS

- TWIN OR SINGLE BARREL
- FULL OR SEMI-STREAMLINED
- DELIVERY TRUCK TANKS
- TRANSPORT TRUCK TANKS

Tailored to fit your needs!

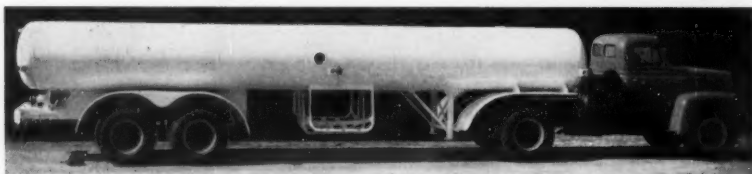
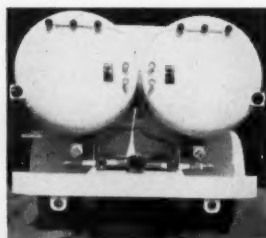


"After shopping around, we decided to have your company install a 1600 gallon twin tank on our new RP170 International. When the truck was delivered, it was more than we really expected in appearance, balance, safety and service. Considering the beauty of the unit, as well as the low price, we feel that we have the finest propane delivery unit available."

That's one of our customers talking . . . and there's plenty more like him. We'd like you to be a satisfied customer, too. We'll build tanks exactly to your specifications, or design a unit to fit your individual needs. Let's talk it over!

Get our offer before you buy . . .
Call us **COLLECT** today!

1600 W.G. Twin Truck Tank 41" dia. x 161" O.A.L. on 172" W.B. International. Rego fittings. ICC Lights and Wiring. Streamlined skirting. 3-Way Piping. 20# Foam Fire Extinguisher. 100-ft. 1" Hose. 50-ft. 1/2" Hose. Neptune Print-O-Meter. K-190 Viking Pump.



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Call us: **STEEL COMPANY** Write us:
Sapulpa 2680 P. O.
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WANTED: Technical Writer

We need a technically trained man under 35 for the editorial staff of BUTANE-PROPANE News. He should have a background of mechanical engineering and experience in LPG or Gas Operations — with emphasis on equipment. He should be able to write clearly and cleanly and have done some work in preparing reports. He should have an inquisitive mind and like to probe into the "Why" of things, and be able to explain to others what he has found out.

Experience in magazine or newspaper production as well as photography is desirable, but not essential.

Duties will include field trips to gather data for original articles.

Application by letter only. Send details to:

BUTANE-PROPANE News

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detected in the clinical examination. Tests were made for reaction time in brake application on emergency stops, ability to see clearly, field of vision, depth perception, color blindness, steadiness, coordination, night driving glare resistance, and several other physiological factors affecting safe driving.

Officers of the Highway Patrol explained the 1955 changes in the motor vehicle code and the rules and regulations. Plant safety supervisors of the Pacific Telephone and Telegraph Co. conducted a safe driving demonstration. Proper procedure and first aid treatment of accident victims were also demonstrated.

Texas safety program brings 25% reduction cost of W/C

Safety efforts of the Texas butane industry have paid off in a big way. An estimated saving of between \$150,000 and \$200,000 a year in premiums on workmen's compensation insurance has been effected during the last two years.

These purse-pleasing facts were revealed to a large group of Texas Butane Dealers Association members and insurance company and refinery representatives in Austin on Nov. 18. The heartening news was made public by Angus McDonald, of the Texas Insurance Commission. It was received with enthusiasm as definite evidence of the early success of the industry's state-wide effort to reduce its accident ratio.

Dec. 1, 1955, was announced as the effective date for the latest reduction—a premium drop from \$1.99 to \$1.74 per \$100 of payroll. This added to a cut last year from \$2.34 to \$1.99 totals a reduction of 60 cents per \$100 of payroll within the last two years.

It is considered an outstanding record equalled by few, if any, other Texas industries. It is declared only an indication of what can be accomplished when dealers determine to reduce their accident ratio. The achievement has won unstinted praise from officials of the State Insurance Department, executives of insurance companies which "carry" butane risks, and from the Texas Safety Association and national safety groups.

Four months ago the current phase of the safety program was launched, after the way had been partly paved by preceding months of activity. The new, and now current, phase revised the original concept of the program and laid a course designed to qualify a large number of workers in the LP G field as safety trainers. From them,

HERE'S A "CHAIN REACTION" YOU'LL WELCOME

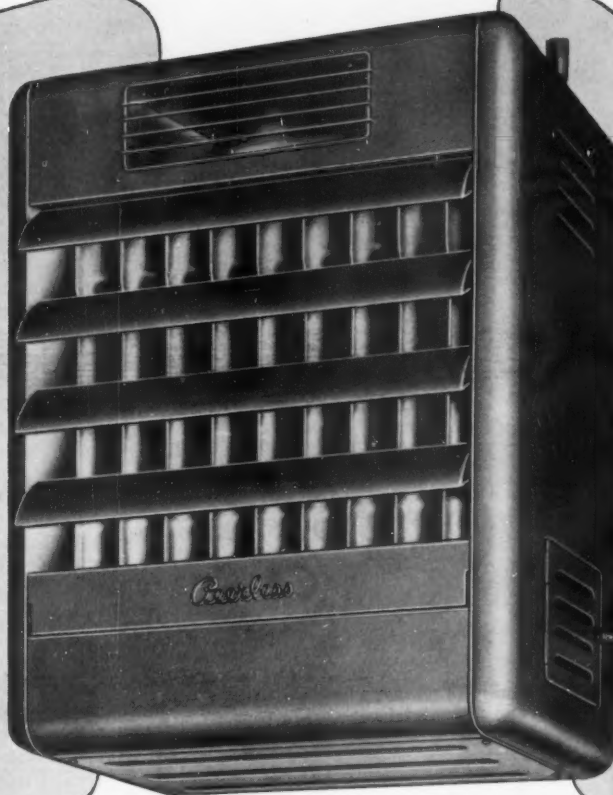
The Peerless line
is your gilt edge investment in customer satisfaction
that earns dividends far beyond the profits of a single sale. Your
dividends continue in future sales . . . a chain reaction that pyramids
astounding profits.

Peerless heaters can be sold with utmost confidence as there is no equal to their
styling, quality, performance, economy and *old fashioned customer satisfaction*.
New 1955 designs are vastly improved and innovations are being constantly
tested in our modern Gas Engineering Lab for your future sales advantage.

**EASY TO
SELL AND
INSTALL**



**A SIZE
FOR ALL
NEEDS**



**DEALERS . . .
FREE
DESCRIPTIVE
LITERATURE
AVAILABLE**



**DISTRIBUTORS . . .
WRITE FOR
COMPLETE
DETAILS
TODAY**

Peerless **GAS UNIT HEATERS**

PEERLESS MANUFACTURING CORP., LOUISVILLE 10, KY.



SERVICE • QUALITY • SATISFACTION

A Complete Line of Single and Twin Barrel Propane Truck Tanks

TWIN BARREL

Very popular model. Can furnish in any capacity you desire. Custom made, to your specifications. A unit to be proud of.

TRANSPORTS

Can furnish in single or twin barrel type. Unit constructed so load can easily be shifted to meet different type tractors. Payload makes you money, this is our specialty.

SINGLE BARREL

For one fuel operation, the 1200 single meets all requirements, can furnish any capacity you desire. The leader in its own field.

Send Us Your Specifications and We Will Submit Quotations.

Complete Modern Shop Facilities for Mounting and Testing All Pumping, Metering and Propane Handling Equipment.



TWIN BARREL



TRANSPORT



SINGLE BARREL

EVERYTHING IN LPG AND ANHYDROUS AMMONIA

The Pasley Mfg. & Dist. Co.

601 East 11th Street • Kansas City, Mo. • Tel. Victor 2369

Here's what we mean when we say —

B-P News Classifieds Bring Results!

Another advertiser writes about results from his ad —
"The inquiries we received from the September issue were far more numerous than we had expected. We should have little trouble making the sales on these units (single and twin barrel tanks mounted on trucks)."

The next time you buy or sell in the LPG industry, use . . .

BUTANE-PROPANE News Classified Ads

198 South Alvarado Street, Los Angeles 57, Calif.

This Ad Pulled 37 Replies

FOR SALE: SEVERAL HUNDRED 60# ICC cylinders at \$3.00 each. Reply Box 115, BUTANE-PROPANE News, 198 So. Alvarado St., Los Angeles 57, Calif.

it was planned, would stem the individual company programs at local levels.

The report of J. A. Mirick, TBDA safety director, showed that from July 20, 1955, when the kick-off conference was held, through to November 18, the report date, a vast amount of work had been accomplished in advancing the program.

Work was being accomplished under six of the eight points adopted at the July meeting. Efforts to implement two of the eight points are yet to be inaugurated, Mirick explained.

In the four-month period of activity, 17 safety trainer sessions or classes were held with 90 butane dealers represented. Enrolled in the classes were 132 men and of this number 118 were certified as qualified to return to their organizations and conduct safety training classes.

As the result of these classes and the qualification of the trainers who were certified after attending the sessions, company level classes are being held regularly by a large number of dealers, Mirick revealed. Reports made to association headquarters on these company-level classes indicate that the program of employee training as laid out by the TBDA safety department is being followed closely and excellent results are being achieved.

Mirick explained the routine of each prong of the eight-point program, showing that each achieves a separate result yet is tied in with all the other points. Of particular importance, he said, was Point 2, the driver and employee selection section. He pointed out that proper screening of applicants for employment, plus competent medical examination, eliminates hazardous workers before they join the payroll. In many instances, he declared, butane dealers are paying compensation for injuries suffered or physical conditions which developed prior to the compensated employee's connection with the payroll. Many firms are using the application and medical examination form furnished as part of the program equipment and are reporting excellent results from adoption of this safeguard against "dangerous" employees.

Insurance company representatives attending the November conference praised the association for the beneficial work it is accomplishing for the industry. They pointed out that insurers are happy to reduce premium rates, explaining that a rate reduction (particularly in connection with workmen's compensation coverage) means that accident ratios have been improved, and that

**Deliver MORE CUSTOMERS per day
... with a single or a twin!**



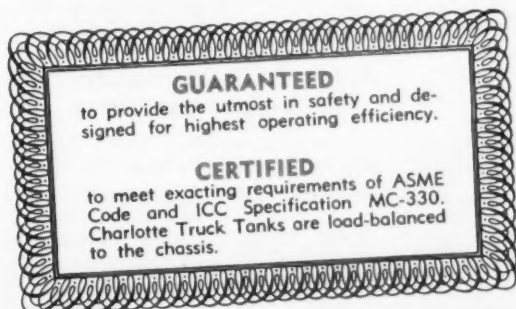
Charlotte's NEW Twin comes in 1300 through 2400 gallons (w.c.). Singles from 1248 through 1800 gallons (w.c.).

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"the companies pay out less in claims than when the accident rate is high." Increased insurance company cooperation in the program was indicated by company representatives attending the meeting.

Merrimac Valley organizing for utility-LPG promotion

Representatives of gas utilities, bottled gas dealers and appliance manufacturers met in the Lowell (Mass.) Gas Co. auditorium on Nov. 29 to form a joint organization representing all gas interests for the pro-

motion of gas and gas appliances in the Merrimac Valley area. A committee composed of John D. Stone, chairman, and members Charles Prichard, Gas Service Co., Nashua, N. H.; James Coffin, Country Gas Service Inc., Danvers, Mass.; and Arthur Newman, Glenwood Range Co., was appointed to develop the details.

The organization is expected to be named the Merrimac Valley Gas Institute. Objectives announced at the preliminary meeting are:

1. A joint advertising and promotion program.
2. The education of engineers, ar-



A committee under the direction of John D. Stone of Gas Inc., Lowell, Mass., developed the details of the cooperative group.

LPG equipment manufacturers . . .

FINANCE YOUR CUSTOMERS

-OR LOSE THEM!

*sell new customers and keep them sold
with F.A.C.'S flexible financing plan*

Today your customers are DEMANDING long-term financing. And when they don't get it, they don't buy. F.A.C.'s installment sales financing plan meets this demand with a sound, business-like solution to your customers' financing problems.

This service is flexible, so you can adapt it to any particular sales situation. We serve many of the nation's leading LPG equipment manufacturers — financing every product from small cylinders to huge bulk storage tanks.

F.A.C.'s Flexible Financing Plan gives you an extra sales tool — because it's another reason for prospects to buy from you. Why not meet their demand? Don't lose customers. Finance them. We urge you to telephone or wire—one of our officers will be glad to serve you.



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chitects and builders on the uses and advantages of gas.

3. Publicity through talks before service clubs, PTA meetings, church groups and other assemblies.
4. Newspaper articles of timely interest.
5. Combatting and offsetting unfavorable publicity.
6. Cooperation in the promotion and conduct of cooking schools.
7. Cooperation on home shows, fairs, etc.

The territory to be covered by the institute lies in northeastern Massachusetts and southeastern New Hampshire. It is a natural trade area, including Haverhill, Lawrence, and Lowell in Massachusetts, and Nashua, Concord and Manchester in New Hampshire, and the surrounding suburbs and towns. It is served by several active gas utilities and numerous L. P. gas dealers. There are at present approximately 170,000 gas customers in the area, and numerous prospects, and a growing number of new home areas.

The Merrimac Valley Gas Institute is the outgrowth of a local need that was recognized more than a year ago by Lou Davis, district secretary of the LPGA of New England, and other leaders of both gas groups in that area.

Home building industry plans biggest exposition

A record-breaking turnout of more than 25,000 persons from the home building industry are expected to attend the National Association of Home Builders annual convention and exposition in Chicago, Jan. 22-26, where they will see the world's largest building products show and

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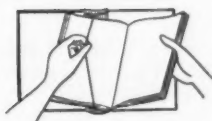
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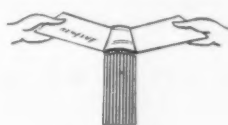
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take part in the most comprehensive convention program in the association's history.

Exhibit areas of the Conrad Hilton and Sherman hotels and the Chicago Coliseum will be filled to capacity as nearly 450 leading manufacturers and service organization display new and improved building products and home equipment items. There will be more than 50 displays of the latest in heating and air conditioning equipment. Appliance and cabinet makers will cooperate in an impressive showing of more than 20 model kitchen and laundry centers in one group.

Broad program planned by Michigan association

A busy two-day program has been planned by Vic Story, chairman of the convention committee, for the 9th annual convention of the Michigan Liquefied Petroleum Gas Association to be held Jan. 30-31 at the Hotel Statler in Detroit.

On the first day of the meeting, delegates will hear discussions on clothes dryer servicing; safe practices, by Chris Neeley, LPGA engineer; regulations, by K. R. D. Wolfe, Fisher Governor Co.; automatic con-

trols by B. Gault of Robertshaw-Fulton Controls Co.; heating with L. P. gas by Larry Ash of Coleman Co.; and a discussion of LPG carburetion by a representative of Ensign Carburetor Co.

On Tuesday, there will be talks by Cal Wright on Michigan LPG civil defense participation and by C. T. Hendrix, Industrial Gas Trucks Manufacturing Co. on fork lift trucks.

Association business—committee reports, annual reports, and election of officers—will also take place on Jan. 31.

Marketers indicate interest in group insurance plan

At the first public presentation of the Liquefied Petroleum Gas Association's group insurance program five marketers indicated their intention of subscribing and 23 others asked for a private consultation with the insurance representatives.

The first presentation took place Nov. 11 at the convention of the Illinois LPGA in Springfield. Past-president Harvey Gigstad, Bettergas Co., was one of the five who said he plans to enroll himself and his employees under the life-health-accident insurance plan.

The other four were W. R. Carpenter, Service Gas Inc.; J. R. Bass, Bass Bottled Gas Co.; Roy A. Fancher, Rural Gas Service Inc.; and T. E. Ennett, Rockford Propane Co.

The LPGA insurance plan is being offered only to LPGA members. It covers all member-company owners and employees for the full package. Dependents may secure medical and accident benefits. There is no physical examination for coverage under this plan.

As developed by a board of insurance fund trustees chosen from the LPGA membership, the plan provides for equal payments by the member-firm and the individual covered. Life insurance benefits and the monthly payments are scaled on a salary basis, giving persons earning over \$7500 a year \$10,000 in life insurance. Other benefits are the same, regardless of income.

The program also provides for two scales of hospital and medical benefits.

Robert E. Maloney, Calor Gas Co., chairman of the insurance fund trustees, said that the LPGA plan gives even the smallest member the insurance purchasing power of a 500-life group. The insurance is being carried by John Hancock Life Insurance Co. for whom Marsh and McLennan Inc. are the broker.



RHT, 17½" long, weighs 3 lbs., copper bronze head 2-3/16" dia., 45° angle.

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Here's real cold weather seller—several dealers have sold 100 to 200 in single season. Large, intense flame holds steady in icy winds and drafts, makes this RANSOME RHT torch ideal for thawing pipes, pumps and equipment. Trigger valve available for intermittent work. Burns 1 gal. LP-Gas in 90 mins. at 10 lbs. Lights instantly even at 30° below.



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RANSOME RHT torch has plenty of summer uses—melting lead, babbitt and white metal; pipe bending, preheating, fender repairs, singeing, weed-burning, flame cultivating, disinfecting, paint burning, etc. Sells to oil fields, farmers, garages, machine shops, factories, sheet metal shops, contractors, public utilities, etc.

Stock NOW. Write TODAY for price list, discounts and catalog.

P-25 Furnace makes good space heater (removable hood available). No fumes, smoke or soot. Designed for melting lead, glue, paraffine, asphalt, etc.

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Liquefied Petroleum Gas Division
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Ransome



Chalk up New Profits!

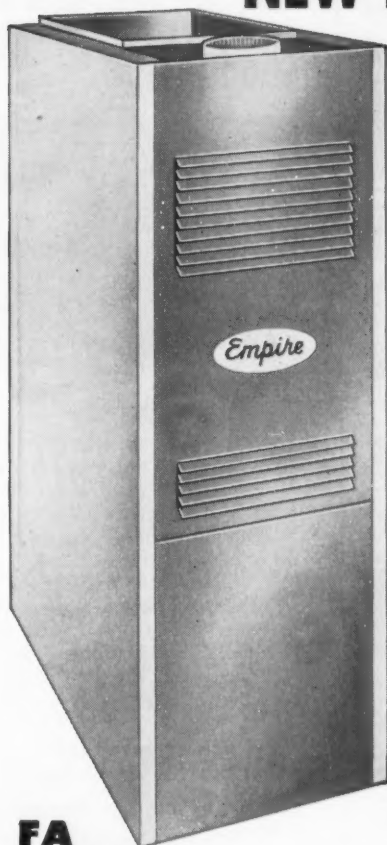
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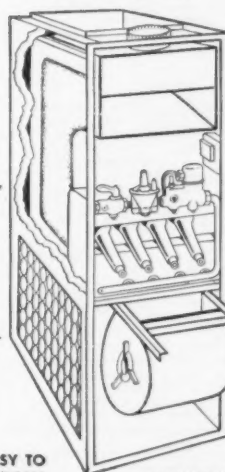
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2. BULK PLANTS 50c

Designing for Safety Features—Accurate Metering—Transfer of LP-Gases—A Bulk Plant Designed for Speed—Pump Hook-Ups—Building a Bulk Plant—Engine in Place of Electric Motor for Liquid Transfer—Modern Design Aids Unloading and Storage—Measuring Liquid in Storage Tanks—Safety Recommendations.

3. FUEL LOADING AND UNLOADING WITH PUMPS AND COMPRESSORS 50c

Unloading Tank Cars—Tank Truck Installations—Bulk Plant Design—Hydraulic Power Replaces Electric Motor—Important Installation Features—Inlet Line Capacity—Four Services with One Pump—Line Resistance—Fast Method of Determining Residual Vapors in Tank Cars—Fundamentals of Liquid Transfer Using LP-Gas Compressors.

4. SERVICING DOMESTIC APPLIANCES \$1.00 (enlarged 8½x11 edit.on)

General Principles of Gas Utilization—Range Servicing—Water Heater, Space Heating Servicing—Meters, Regulators and Related Pipe Fittings—Gas Refrigeration Servicing—Appliance Changeovers—Corrosion of Hot Water Storage Heaters—House Piping and Appliance Installation—Range and Refrigerator Installations—Heating Installations—Venting—Installations: Water Heater, Clothes Dryer, Incinerator—The Venting of Gas Appliances.

5. BULK CONSUMER SYSTEMS 50c

Regulator Freeze-Ups, Causes and Remedies—The Right Regulator for the Job—Regulator Operation—It Pays to Service LP-Gas Equipment—Vaporization—Determining Storage to Serve Demand—Line Testing Piping—Tank Installations—Combining Deliveries and Collections With Meter Readings—Supply Tank Installation With Special Trailer Unit—Regulating Pressure—Pipe Lines—Testing Procedure.

6. SELLING \$1.00 (enlarged 8½x11 edit.on)

How to Find New LPG Customers—Who the Best Prospects Are for Heating Equipment—Keeping a Sale Sold Through Service—Selling to Summer Camps—How to Size and Sell Water Heaters—Build Your Load With Clothes Dryers—The New Home Market—Advertising's Part in the Sales Campaign—How to Be a Successful Salesman—How to Get Your Share of the Industrial Market—You Can Boost Your Sales With Trade-ins, Fair Displays, Demonstrations, Using the Testimonial Letter.

7. COMMERCIAL APPLICATIONS 50c

Introduction to Commercial Cooking—Commercial Cooking—Cooking Time and Temperature—Selling the Chef—The Tailor Needs Gas—Challenge of the Commercial Load—Heat Control Is Key to Profit in Commercial Cooking—Gas Heater for Potato Cans Offers New Fuel Application.

8. INDUSTRIAL APPLICATIONS 50c

Torches and Furnaces—Flexible Heat Treating—Industrial Gas Loads Are Velvet for B-P Dealers—No Frozen Switches for Railroads—The Railroad Load Potential; A Summary—Fusing Plastics—Propane Plays Important Part in Midwest Heat-Treating—"Infra-Red" Paint Drying—Silver Brazing Broadens Hard Soldering Field—Practical Economies of High Pressure LP-Gas Lines.

9. FARM APPLICATIONS 50c

Dehydration Helps Delivery of Farm Products—Fast Drying, Early Marketing Changes Grain Farmer's Future—Processing Alfalfa—Mechanical Dehydration—Drying Peanuts Saves Losses, Speeds Deliveries—Rice Dried in 24 hours—LP-Gas Tobacco Curer Opens Big Load to Southern Dealers—Sweet Potato Curing—Dairying—Weed Burning—Gas-Powered Engines—Northwest Arkansas Broiler Show—Butane Brooders Guard Chicks Against Sub-Zero Weather.

10. POULTRY BROODING AND INCUBATING 50c

Poultry Brooding Market Analysis—Greater Brooder Profits With Gas—Our Place in the Turkey Business—Economics of Gas Brooding and Replacement of Competitive Equipment—Turkey Incubating—Brooding Hazards Reduced by Gas Vaporizer—LP-Gas Proves Best Fuel for Cold Room Poultry Brooding—Butane Underwrites Turkey Profits.

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Drivers "Work the Angles" to Get Million-Mile Truck—13 Years Experience With Converted Trucks—LPG Delivers Livestock in Better Condition—The Great Plains Winter-Summer Ratio Is Upside Down—Three Years of City Bus Operation With LPG Fuel—Conversion of Heavy Equipment—LPG Tractor Sales Depend on LPG Dealers' Effort—The Woods Are Full of Good Prospects—Mistletoe Express Saves \$15,000 a Year With LPG—LPG Reduces Fire Hazard in Lumber Yard Fleet—Gasoline Can't Match LPG as a Stand-by Engine Fuel—Ignition Timing Problems—And Other Subjects.

12. TOWN PLANTS 50c

Isolated Butane Systems—Laying Copper Mains—Central Plants; Safe Design and Operation—Serving "Fringe" Areas—Propane Storage in 24-Inch Seamless Tubing Solves Peak Demand—More Heat for Less Money Determines Butane-Air Town Plant Installation—Utility Sells Beyond Mains, Then Changes Over Town Plant—Converting Two Washington Towns to Propane-Air—6000 Meters Converted—High Cost Turns Utilities to Propane.



the trade

Two west coast district sales managers named by Rockwell

New appointments for two key West Coast sales officials have been announced by Rockwell Manufacturing Co.'s meter and valve division.

William F. Gulley, Seattle district sales manager since 1951, has been named San Francisco district manager. He is succeeded by Roy E. Nimtz, a sales engineer in the San Francisco district for more than three years.



W. F. Gulley



R. E. Nimtz

Jack H. Walters, gas products manager, is now manager of gasoline and oil products at the Pittsburgh headquarters. He is succeeded by Robert B. Kitzmiller, San Francisco district sales manager since 1952.

T. O. Carson, assistant product manager, Nordstrom valves, is now manager of distributor sales and M. F. Groom, sales engineer from Houston, is assistant manager of distributor sales.

New district managers appointed by Servel Inc.

James H. George, Atlanta, Ga., a veteran of 22 years in appliance selling, has been appointed sales manager of the Pittsburgh district of Servel, Inc.

Field appointments for seven district managers and two sales representatives are also announced by Servel.

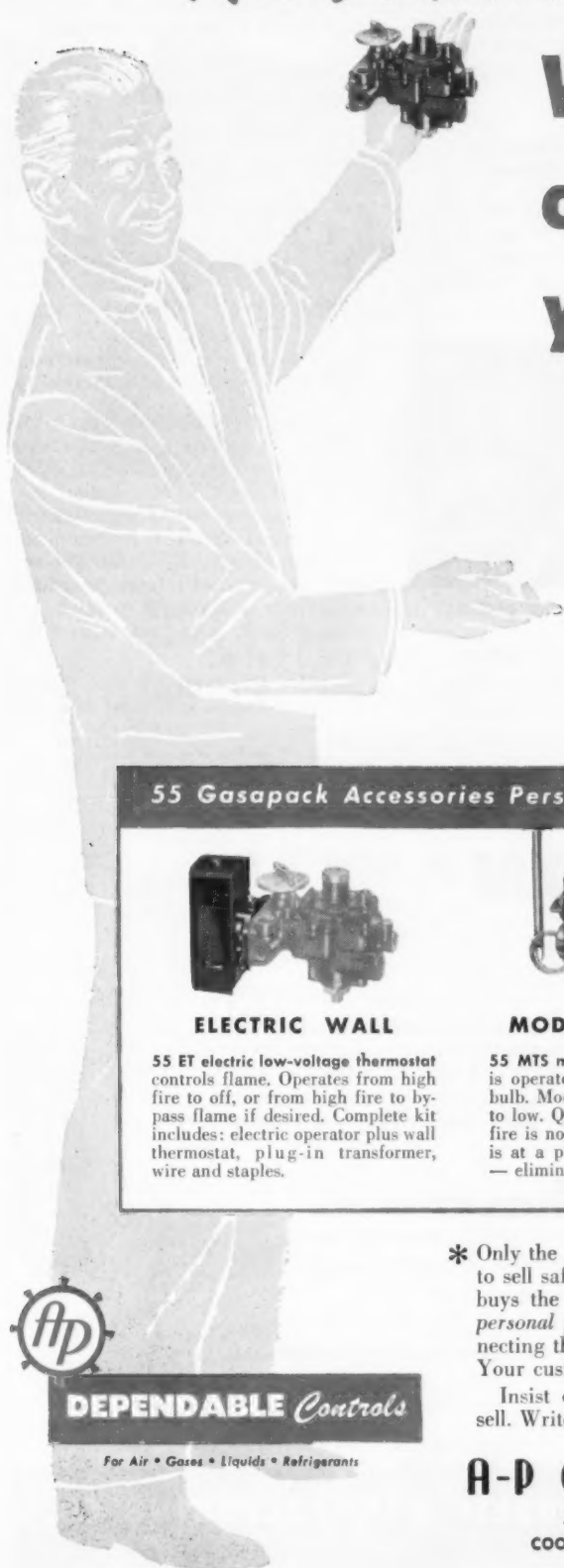
The district managers and their new headquarters follow: E. A. Dunham, New York; Emil P. Nensel, Philadelphia; P. E. Arnold, Chicago; Hollis G. Hayes, Washington, D. C.;

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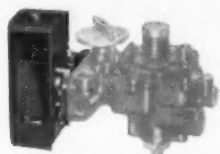
Mr. Dealer:



What other gas control gives you all this?

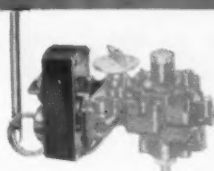
- CHOICE OF 3 THERMOSTATS —
for any comfort need
- INSTANT INSTALLATION —
anytime, anywhere, by anyone
- PERFECT AUTOMATIC CONTROL —
on all gases

55 Gasapack Accessories Personalize* the Heater for Every Customer



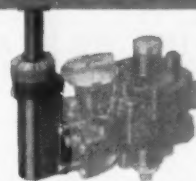
ELECTRIC WALL

55 ET electric low-voltage thermostat controls flame. Operates from high fire to off, or from high fire to bypass flame if desired. Complete kit includes: electric operator plus wall thermostat, plug-in transformer, wire and staples.



MODULATING SNAP

55 MTS modulating snap thermostat is operated by a sensitive thermo-bulb. Modulates the fire from high to low. Quietly snaps off when low fire is no longer required. Ignition is at a point close to "wide-open" — eliminates burn-back in venturi.



MODULATING

55 MT modulating thermostat — A liquid-charged thermo-bulb modulates the flame between high and low fire, maintaining a constant, comfortable temperature despite fluctuating outside temperatures. No wiring required.



DEPENDABLE Controls

For Air • Gases • Liquids • Refrigerants

* Only the new A-P 55 GASAPACK gives you *everything* needed to sell safe, silent fully automatic control. When your customer buys the space heater — *he can choose the accessory of his personal preference!* You install it in minutes without disconnecting the valve. Result: You offer *more . . .* you make *more*. Your customer gets exactly what he wants.

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Gene Holzschuh, Seattle; James G. Hayden, Minneapolis; and Carl P. Duke, Omaha.

Dunham and Arnold will also serve as managers of Servel branches in New York and Chicago, respectively.

New sales representative assignments will station Richard Roza, formerly in Minneapolis, with the company's Chicago branch and Andrew Forbes in Los Angeles.

Jerry Laine, a 25-year employee at Servel, has been promoted to manager of the company's sales service department.

In his new position, Mr. Laine will be responsible for supervising and coordinating non-technical services to Servel users, dealers and distributors. He succeeds Emil Nensel.

Queen Stove Works names new division sales managers

Two new division sales managers have been appointed at Queen Stove Works, Inc., Albert Lea, Minn., F. A. Trow, president, has announced.

C. J. Murphy, formerly field sales manager, is now sales manager of the Superflame appliance division which manufactures gas- and oil-fired heaters.

L. A. Olson has been appointed to sales manager of outdoor appliances for the American Gas Machine division of the company, which manufactures portable ice chests, cook stoves and oil and gas lanterns. He formerly was assistant sales manager.

Billings and Midland sales offices opened by Tuloma

Tuloma Gas Products Co., wholesale marketers of L. P. gas has announced the opening of sales offices at Billings, Mont., and Midland, Texas.



M. W. Barker



R. J. Danner

Marc W. Barker will be in charge of the Billings office which will headquarter the company's marketing op-

erations in Montana, Wyoming, and North and South Dakota.

Sales operations for west Texas will be headquartered in Midland with Ralph J. Danner in charge.

J. P. Foster joins Tappan as assistant director of PR

John Pierce Foster has assumed the position of assistant director of public relations for the Tappan Stove Co., Mansfield, Ohio.

Mr. Foster will be concerned with press relations, publicity, promotion, community relations, and other aspects of public relations activity.

Public relations representatives appointed by General Controls

General Controls Co. has named S. Alfred Walker as public relations representative at its principal office in Glendale, Calif. Mr. Walker formerly was associated with General Electric and Young & Rubicam advertising agency. His duties at General Controls will be coordinated with those of Henry B. Safford, advertising and sales promotion manager.

General Controls has also named B. L. Lerch to the post of Midwest

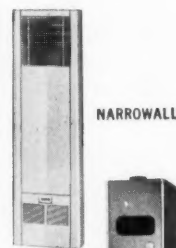
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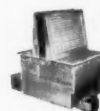
- ★ Superior Performance and Value
- ★ Broad Line of Quality Furnaces
- ★ Progressive Dealer Policy
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- ★ Minimum Inventory Requirements



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CONTENTS

PART 1. Introduction
The Progress of the Industry
The ABC of L. P. Gas

**PART 2. Physical and
Chemical Properties**
Properties of the Hydrocar-
bons in L. P. Gas
Properties of Butane-Propane
Mixtures
Volume Correction Factors
Analytical Determination and
Testing
Fire Protection and Control

**PART 3. Production of
L. P. Gas**
Natural Gasoline Plants,
Recycling Plants, Oil
Refineries

**PART 4. Transportation and
Storage**
Delivery by Truck, Rail,
Water, and Pipe Line
Storage Tank and Pressure
Vessel Design
Liquid Metering and
Pumping Systems

**PART 5. Distribution
of L. P. Gas**
Installing and Servicing
L. P. Gas Systems
Semi-Bulk Systems
Bottled Gas Systems
Gas Utility Service from
Central Plants
Multiple Utility Service from
a Central Plant

**PART 6. Utilization
of L. P. Gas**

Comparative Performance
With Other Fuels
Appliance Installations and
Testing
Domestic Applications
Commercial Applications
Industrial Applications
Enrichment, Peak Load, and
Standby Uses
A Fuel for Internal
Combustion Engines

PART 7. Regulations
N.B.F.U. Pamphlet No. 58
Motor Carrier Tariff No. 7
Freight Tariff No. 4
Unloading from Railroad
Tank Cars
Marine Regulations

PART 8. Appendix
Interchangeability of Other
Fuel Gases with Natural
Gas
L. P. Gas Insurance
Handy Tables for Field Use
Regulators
Flame Weeding
Bibliography
Glossary of Terms
General Index
Table and Chart Index

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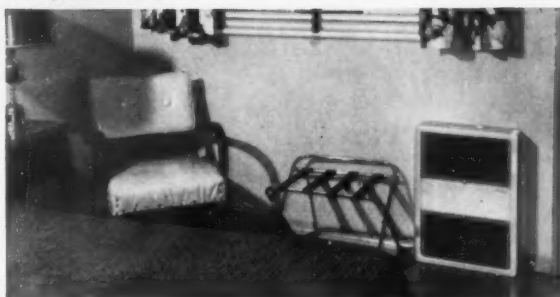
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GAS

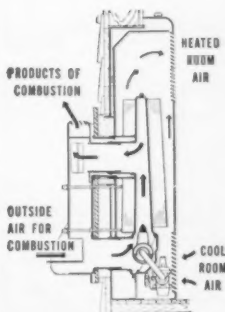


Saf-Aire burns gas in a ceramic-lined steel chamber,
completely sealed from the room air being heated

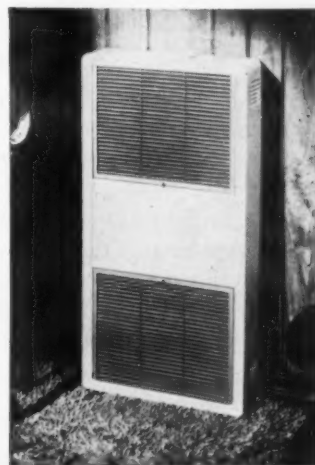
The perfect unit for heating added rooms...hard-to-heat
rooms...enclosed porches...garages...workshops...
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operates independently and has optional thermostatic
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all conditions of use.

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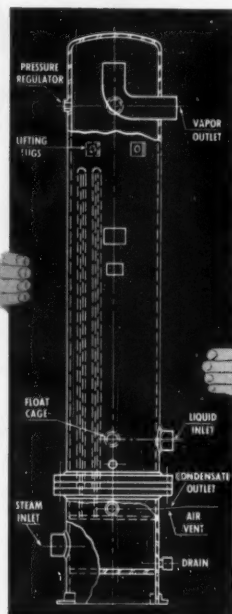
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(STEAM TYPE)



regional manager. His assistant, Norbert A. Grainer, succeeds him as manager of the Chicago branch.

Douglas S. Sterner has rejoined the company as manager of the air conditioning - refrigeration division in Glendale.

Two regional representatives named by General Controls are Jack Croushore in Chicago and Ray Wheeler in Columbus, Ohio.

IHC advances Duane Kuntz to assistant manager of truck sales

Duane F. Kuntz has been named assistant manager of motor truck sales for International Harvester Co.'s motor truck division. He was previously manager of the company's southwest motor truck sales region, and has been located in the company's general office in Chicago as a regional manager since 1950.

He joined International Harvester in 1926 as a sales trainee.

Fisher names Don Ryan sales engineer in eastern area

Don A. Ryan is a new Fisher Governor Co. sales engineer, serving the territory of Pennsylvania, Maryland, New Jersey, and Long Island from Fisher's eastern office in Westport, Conn.

Following college he worked with the Stanolind Oil & Gas Co. in Texas and Louisiana in field development work. After a year-and-a-half he joined the Pyrofax organization, being assigned to the engineering and development laboratory. Before joining the Westport office, Mr. Ryan spent a year at the Fisher office and factory in Marshalltown, Iowa.

Four new coordinators named by Gulf to assist vice presidents

Four new coordinators have been appointed by Gulf Oil Corp. to assist senior vice presidents of the corporation in carrying out their administrative functions.

R. A. Hunter has been named coordinator, marketing department. As such, he will report directly to Senior Vice President H. G. Meador, marketing, and work with him and the vice presidents of domestic marketing and foreign marketing in the formulation and coordination of policies, plans and programs.

A. C. Rall and J. F. Tim Jr. have been appointed coordinators on the staff of W. L. Naylor, senior vice president, financial.

Hollis D. Hedberg has been named coordinator and appointed to the pro-



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duction staff. He will report to R. O. Rhoades, senior vice president, production.

All four of the new coordinators are veterans of long experience, not only with Gulf, but in their respective fields. They will be located in the company's general offices in Pittsburgh.

Gulf had previously announced the appointment of E. J. Kirberg as coordinator, manufacturing department.

Preway Inc. names Shea advertising manager

Henry F. Shea has been named advertising and sales promotion manager of Preway Inc., Wisconsin Rapids.

Mr. Shea has been with Preway for about 20 years.

Irving Shipp is sales manager of Jacobs Manufacturing Co.

Irving W. Shipp has been appointed sales manager of Jacobs Manufacturing Co., Bridgeport, Ala. He was formerly associated with Queen Stove Works, Albert Lea, Minn., Herron Stove & Foundry Co., and Florence Stove Co.

Carrol V. Robinson, who has been associated with the gas industry for the past 30 years, has been made product engineer. He was also with Herron Stove and has had extensive experience in the design of L. P. gas burners.

Mr. Shipp has appointed Marion Burnell as salesman for Arkansas, Missouri, and Mississippi. He will headquarter in Memphis.

R. A. Jacobs is president of the company, Grady Jacobs is vice president, and Earl Good is assistant secretary-treasurer.

Les Brower is appointed to Roney sales force

Roney Inc., Dallas, has added a new salesman to its staff. Les Brower will cover a large part of the Texas territory for the company.

Prior to his 12 years of service in the U. S. Air Force, he worked in the Oklahoma oil fields. Among other jobs, he laid the pipe to carry off waste products which are now used in the manufacture of butane.

Servel names A. C. Specht to manage its midwestern region

A. C. Specht, a veteran of 26 years in selling and sales administration, has been appointed manager of the

GAS-FIRED UNIT HEATERS

by **Modine**

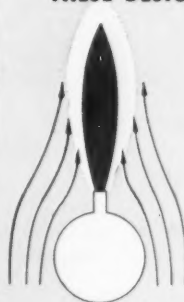
save you money right from the start

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shipping,
installation
costs**

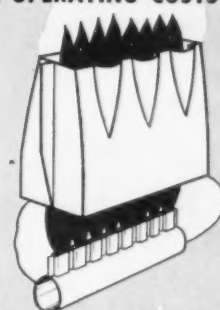
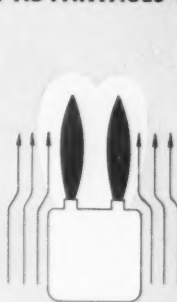
| WEIGHT COMPARISON | | |
|---------------------------|--------------------------|--------------------|
| Brand | Capacity (Btu/hr. input) | Approx. Net Weight |
| Modine (aluminized steel) | 105,000 | 105 |
| Modine (stainless steel) | 105,000 | 95 |
| Brand "A" | 100,000 | 170 |
| Brand "B" | 102,000 | 196 |
| Brand "C" | 90,000 | 175 |
| Brand "D" | 100,000 | 165 |
| Brand "E" | 100,000 | 210 |
| Brand "F" | 100,000 | 210 |
| Brand "G" | 105,000 | 170 |

Light weight, without sacrifice of strength or efficiency, makes Modine Unit Heaters easier to handle, faster to install. Also cuts need for expensive support structures.

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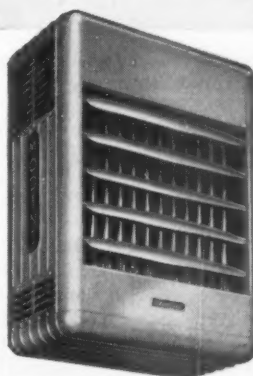
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Single-row burner ports help insure adequate secondary air supply. As a result, you get maximum combustion efficiency, more delivered heat per fuel dollar.



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midwestern region of Servel Inc. with headquarters in Chicago.

The midwestern region coordinates Servel appliance sales activities in northeastern and southeastern Illinois, all of Wisconsin and North Dakota, most of Michigan, Minnesota, Indiana and Kentucky, northeastern South Dakota, and small sections of Iowa and Ohio.

A long-time employee who started as an inspector 25 years ago has been promoted to manufacturing manager in the Servel home appliance division.

He is Carl E. Deig who will be responsible for all phases of appliance manufacturing. Reporting to him will be the managers of production control, manufacturing engineering, and production.

H. J. Berkel named director of personnel for Bryant

Howard J. Berkel has been appointed director of personnel for Bryant. He relinquishes similar responsibilities for Carrier's unitary equipment division with headquarters at Syracuse, N. Y.

Mr. Berkel joined Carrier in 1951 as executive assistant to the vice president of Carrier's personnel division. Subsequently, he served as employment manager for supervisory and technical personnel.

Carlson is head of engineering for American Car & Foundry

American Car & Foundry Division, ACF Industries Inc., has appointed Norman E. Carlson as director of engineering. In addition to his new duties, Mr. Carlson will continue as works manager of the St. Charles plant.

Mr. Carlson became associated with ACF in 1951 as assistant chief mechanical engineer and in 1954 was appointed works manager of the ACF plant in St. Charles, Mo.

Wedgewood Names M.W. Glad General Service Manager

The Wedgewood major appliance division of Rheem Manufacturing Co. has announced the appointment of Matthew W. Glad as general service manager.

As key man in the Rheem-Wedgewood service department, Mr. Glad will work closely with the division's dealer organization. He will headquarter at the Newark, Calif., plant, center of Wedgewood production operations.

Magic Chef names Minnigerode to assistant ad manager

E. W. Minnigerode, who joined Magic Chef Inc. last June as production manager, has been named assistant advertising manager.

Before joining Magic Chef, Mr. Minnigerode served as art director and production manager for a St. Louis advertising agency, studio representative for a national art studio, and was president of Master Typographers Inc.

Mills Jr. named assistant sales manager of Bastian-Blessing

Ellsworth L. Mills Jr. has been named an assistant sales manager of the Rego division of the Bastian-Blessing Co., Chicago.

Mr. Mills, who transferred from engineering to sales last May, has been with Rego more than five years and will be in charge of customer relations in the division's Middle West sales territory. His office is located at Bastian-Blessing's headquarters in Chicago.

Radiator Specialty Promotes Hoffman to Sales Manager

Appointment of David Hoffman as general sales manager of Radiator Specialty Co., Charlotte, N. C., has been announced.

The new sales manager joined the firm in 1948 as assistant sales manager. In 1953 he was appointed division sales manager.

Eskew promoted to product director for Servel

Robert K. Eskew, a veteran of 22 years in sales, field service, manufacturing and engineering at Servel Inc., Evansville, Ind., and one of the first members of the company's air conditioning organization, has been promoted to the key position of product director for all-year air conditioning.

Leo J. Strohmeyer

Leo J. Strohmeyer, vice president of the sales department of Eclipse Fuel Engineering Co., Rockford, Ill., died on Dec. 1 after a long illness.

Mr. Strohmeyer had been associated with Eclipse and the gas industry for the past 35 years. He started with the company as engineering clerk and advanced to the position he held at the time of his death.

POWER

**Agriculture
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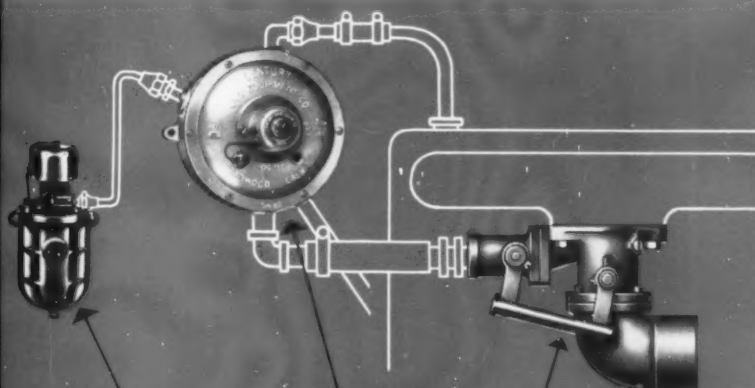
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new low cost conversion



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LP-GAS
Carburetors
with metering valve



Century combination filter pack strainer and electrically operated fuellock valve.

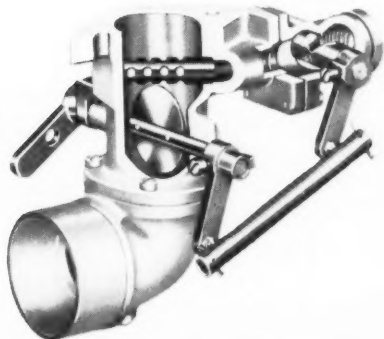
Century Model H Converter, a 2-stage type that locks off to atmospheric pressure. Cast in coils. All safety features.

Century 3c Carburetor with years ahead metering valve system.

MODEL H CONVERTER

for engines up to 100 hp.

with a high performance record



METERING VALVE on Century Carburetors provide positive control of the gas at any throttle position and thus provide a perfect fuel-air mixture for starting, idling, power and economy.

NOW YOU CAN CONVERT farm tractors, industrial trucks, and stationary engines at a new low cost and still provide the high efficiency and performance of Century Carburetion. Why? Because Century's new Model H Converter is made specially for engines of 100 hp. or less. Its new compact design and matched capacity is lower priced. Easy to install, it has all the features of larger Century Converters.

What a combination! A Century 3c Carburetor with metering valve, a power matched Century (Model H) Converter and a Century (strainer) Fuellock — here's your 3-way guarantee of customer satisfaction. Get the facts today; write for literature.

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REGULATORS



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In order to identify our company name more readily with BEAM products, on and after January 1, 1956, The Parkdale Company will become BEAM PRODUCTS MFG. CO.

Will you please change your records accordingly?

No personnel or ownership changes are involved.

BEAM products are nationally recognized in the LP-Gas Carburetion field and we feel the trade name should be used for the company as well as the products for easier identification.

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REGULATORS • CARBURETORS • SOLENOID VALVES



Cruising cabs pick up many fares, but it takes gas to keep the car moving.

Propane pays in six ways for City Cab Co.

Carl Abell • Editor

THE City Cab Co., Council Bluffs, Iowa, is another of the rapidly growing list of taxicab companies that are changing their operations from gasoline to propane. An extended test showed conclusively that the advantages to be gained were worth considerably more than the cost of conversion.

Frank Nigro, owner-manager of City Cab Co., first became interested in propane some three years ago, when he read an account of the conversion of the Yellow Cab fleet in Milwaukee in one of the national taxicab magazines.* Mr. Nigro made a trip to Milwaukee for personal investigation of the Yellow Cab operation on propane, and shortly thereafter made arrangements to convert two of his own cabs.

The two cabs selected for the first test conversions had been in operation on gasoline for some time, one for approximately 25,000 miles, the other for nearly 75,000 miles. Both

were consuming oil, and this condition continued without noticeable change following the conversion. The saving in fuel cost and the cleaner condition of the crankcases and less frequent need for oil changes convinced Mr. Nigro that the conversion of the entire fleet would be worth while. It also indicated the desirability of making the conversions before the engines showed signs of cylinder wear.

In July, 1954, City Cab Co. com-



Frank Nigro, owner-manager of City Cab Co., calculates his savings from using propane in his 16-cab fleet.

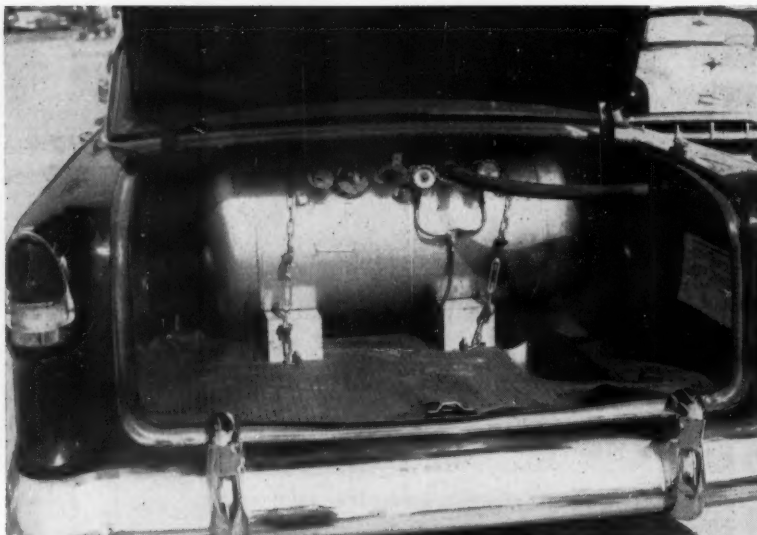
pleted the installation of a storage tank and dispenser at the front of the company's shop, and began the conversion of the fleet, which at that time numbered seven cabs. Progress of the work was made difficult because the business was growing rapidly and vehicles could not always be taken out of service long enough to install the equipment. In less than a year thereafter the fleet numbered 16 vehicles.

Mr. Nigro quotes the following advantages of propane over gasoline, which have become apparent as the result of their experience to date:

The cost of fuel has been reduced by a substantial amount.

Time required to service the fleet has been reduced. The propane tanks hold 40 gals., which permits operation for from 36 to 38 hours between refills. Gasoline tanks had to be filled just about twice as often. There has been a substantial saving in maintenance time. Aside from the routine work on the electrical system, the only maintenance required on the engines and fuel system has been the replacement of four solenoid valves.

*For an exposition of the same conversion see BUTANE-PROPANE News, December, 1952, p. 123.



Tanks are mounted without cutting or defacing the inside of trunk. Partition is carefully sealed, and pressure relief valve vented to outside air.

Oil Consumption

Oil consumption shows a great saving. Oil is now added to the crankcase supply on the basis of one quart per 500 to 750 miles, which is half as much as was required with gasoline. The drainage period has been extended to 30,000 miles. The proper mileage for filter change appears to be higher than with gasoline, as there is less material for them to remove from the oil.

Winter starting has been easier on propane. This is reflected in longer

battery life and reduction of maintenance expense on starting motors.

Mr. Nigro considers propane a safer fuel than gasoline. His reason for this belief is that in filling gasoline tanks the service man does not know for sure that the tank is full until the gasoline runs over the spout, and this spilled gasoline always constitutes a fire hazard. In filling propane tanks, these spillages do not occur. When the liquid propane reaches the liquid level gauge, the filling stops, with only a minimum of fuel discharged into the air. There is never any fuel

standing in pools on the service ramp to ignite from any accidental cause. The no-smoking rule is strictly enforced around the filling island.

Rupturing Non-existent

Likewise, the possibility of rupturing a propane tank in a traffic accident is almost non-existent. Extreme care is taken to seal off the trunk from the passenger compartment, and the pressure relief valve is vented to the outside atmosphere by means of a heavy hose securely anchored to the fittings, so even if a pop-off should occur the discharge is outside the cab and directed upward.

City Cab. Co. has found that their winter fuel consumption figures for gasoline and propane match very closely. During the warm months the miles per gallon on gasoline may get up to as much as two more than on propane, but the difference in per-gallon cost is more than enough to make up the difference.

Cost of Conversion

Conversion costs in this fleet have averaged close to \$200 per car. While this amounts to a substantial investment on 16 cabs, it is not subject to the same depreciation loss as the rest of the vehicle, as the complete fuel systems can be removed at the time of trade-in, and installed on the replacement cab.

The City Cab Co. fleet is fueled in the company's own service station, which is on the street end of the large lot where the service garage is located. It consists of a 1000 gal. tank installed on a large concrete apron. The pump and meter are underneath the tank, and the dispensing hose and pump switch are housed in a locked cabinet mounted on the crash fence which surrounds the storage facilities. A vapor return hose is used to speed up the filling, as there are frequently several cabs in at once for fuel, and taxis that are not on the street are not earning.

From the standpoint of the City Cab Co., propane is a profitable fuel. The propane dealer, American Propane Gas Co., Omaha, likes it also. It is a nearly constant load the year 'round. Truck time and mileage in delivering the fuel is low, and the office overhead on the account is less than it would be on a comparable volume of domestic fuel. ■

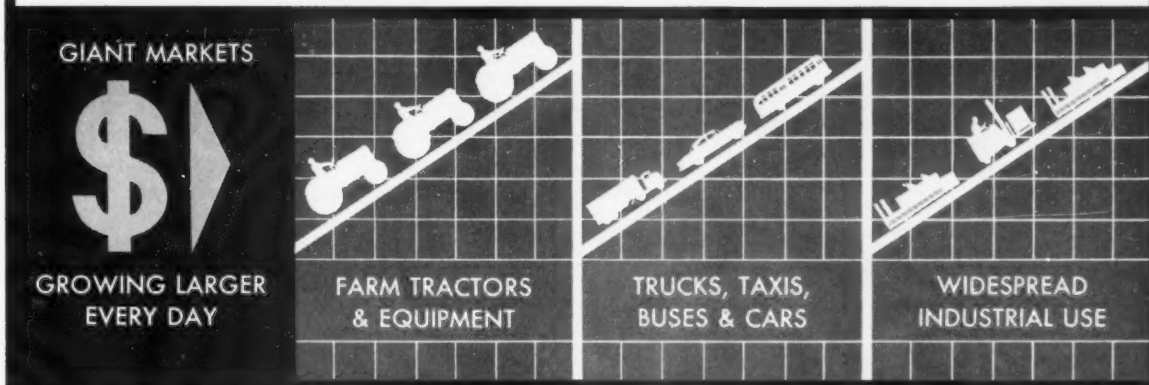


The 40-gal. cab tanks must be filled quickly to avoid delays and keep the cabs on the streets. Vapor return hose speeds the process.



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The market for Zenith* LP Carburetion is one that runs into the millions of units. With the ever expanding use of LP Gas on farms, in industry and on the highways, today's sales are but an indication of the volume sales that lie ahead.

Zenith LP Gas Systems are the product of the oldest and widest-experienced carburetion manufacturer in the industry. Individual applications are factory engineered for a wide line of vehicle, industrial and farm uses.

Remember, too, every Zenith installation means an added source of fuel revenue from satisfied customers.

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Propane engine provides sub-zero refrigeration for 20-ton loads of meat moving from Denver to Los Angeles. The 60-gal. propane tank is under center of body.

Sub-zero refrigeration for two-day meat haul on propane

What do you do when the market is clamoring for your product (perishable) but the freight rates are eating up your profits and the slow schedules are inviting spoilage? If you were Gene Mapelli, you'd lease a refrigerated truck, equip it with propane-operated equipment, and cut costs to a point where you could compete in a highly lucrative market.

By Gene C. Creighton

THE development of refrigerated long-haul facilities that permit rushing 40,000 lbs. of prime, hand-selected beef into the Los Angeles market is boosting profits at H. Mapelli and Son, wholesale meat dealers of Denver, Colorado.

Prime Colorado beef, fattened in the top-quality feed lots around the city, has always been as much in demand in the California market as the famed "Kansas City steaks," according to Gene Mapelli, son of the founder. However, disastrously high freight rates, slow transportation,

and other drawbacks had prevented successful marketing of this company's beef along the West Coast, even though the Mapelli concern was shipping eastward with consistent profits. Two and a half years ago the Mapelli concern made its first entry into the California market with refrigerator-car shipments, offering "personalized service," whereby beef to fit the consumer's specifications was personally selected by Gene Mapelli, and guaranteed. Because of high transportation costs, the price of the delivered product was ex-





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Manchester offers you the most complete line of LPG tractor conversion tanks. With these tanks you get a fast, simple conversion and unmatched operating safety. There are tanks to fit every standard tractor including the latest models. To offer you a conversion that will look "factory-made," all Manchester tanks and mounting brackets are pre-fitted. They fit the tractor perfectly and with a minimum of installation effort or labor. Write for the Tractor Tank Installation Manual.

Manchester Truck LP Gas Fuel Tanks are available in all sizes. They are built to satisfy the particular needs of your customers. Nothing has been spared to give you the best obtainable in engineered design, quality and workmanship. Manchester's easily installed tank mounting brackets are available for all sizes of tanks. Write for the Design and General Information Chart (which includes tables for figuring tank capacities).



Manchester (lifetime) Fork Lift truck tanks conform to latest industry standards for safe and efficient LPG operation. Each of the 12 standard sizes is equipped with an excess flow check which automatically stops the flow of gas if an accident breaks the fuel line or breaks off the valve.

You can use the Manchester Power-Jet Hand Burner to control weeds and pests in irrigation ditches and on fence rows and roadways, for burning brush, thawing pipes, disinfecting roosts and for a multitude of other jobs around the farm. A trigger control enables you to shoot the flame only when it is needed. And the lightness and balance of the torch make a single-handed operation out of any flaming you do.



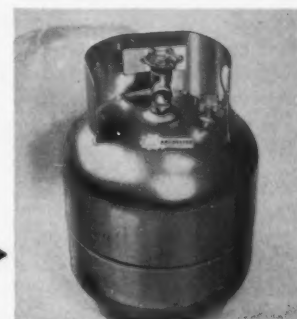
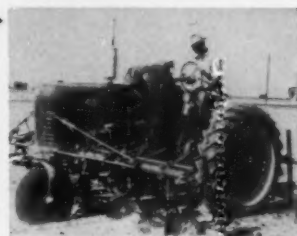
The Manchester Super "8" LPG Hand Burner makes weed control easy and economical. It weighs only 5¼ lbs. It is 8 feet long—it keeps the heat of the flame away from the operator and permits him to reach over fences and across most irrigation ditches. The burner head is at an angle to the body of the burner—a twist of the wrist gives coverage of an entire ditch. The jet action of the flame decreases the weight for the operator to control; he can manipulate the burner freely. The burner has a 6 foot, 270° swing boom on top of its 250 gal. tank which keeps the LPG line free of the wheels.

The Manchester "Super Flame" 300 LP Gas ditch bank burner eliminates ditch clogging with its resultant depositing of silt and loss of water due to evaporation. It has a liquid vaporizing burner head located at the end of a 17 foot, manually operated boom. Controls for the boom and burner head are at the operator's fingertips. The flame can be directed over the fences, to both sides of a ditch and under overhangs. The burner will, in two passes, clear one mile of ditch per hour using 75 gallons of LPG. Write for the educational film strip "Potentials in LP Gas Weed Burning."



Burn a swath 18 ft. wide with the Manchester Power-Flame field burner which enables your customers to economically control weeds and surface insects in alfalfa. The Power-Flame burner is being used successfully for pre-emergence burning in onions and tomatoes, for strawberry burning, for drying potato vines for easier and more uniform harvest and for many weed control jobs. Under many conditions it will burn 30-40 acres a day. The Power-Flame burner has three six-foot burner sections which fold up easily for road travel.

Manchester has for trailer owners a light weight, compact, 5 gallon tank. The tank has a UL-approved POL and Safety relief valve, a replaceable 10% valve and a sturdy valve guard. For easy carrying, the guard has a rolled handle. An automatic seam weld gives the tank additional strength. For vacationers and campers, Manchester has horizontal tanks to make out-of-doors cooking easier.



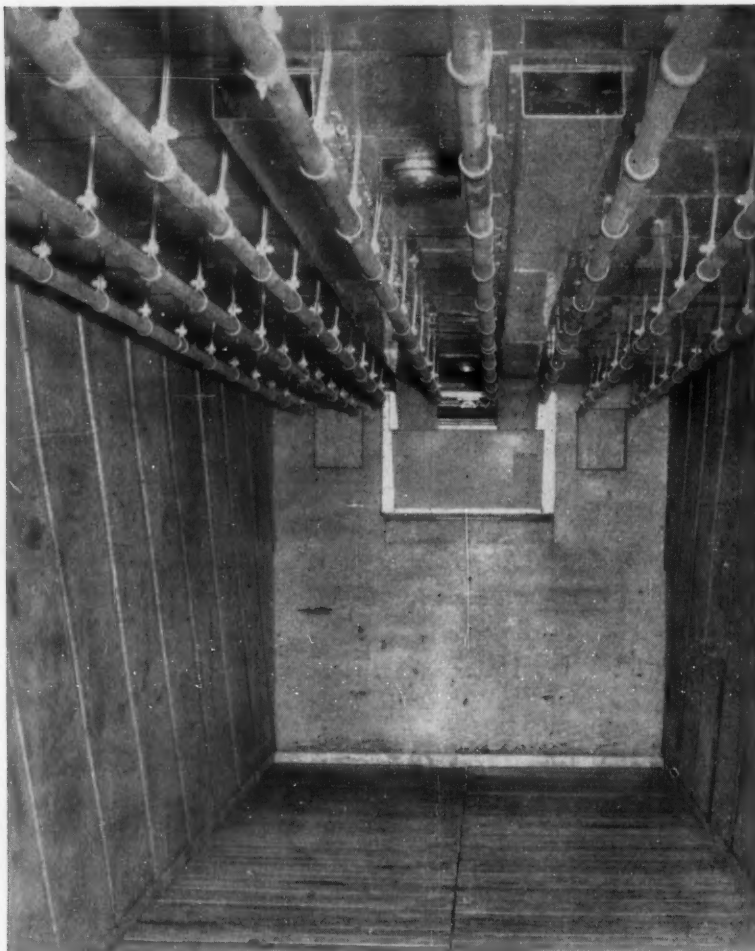
MANCHESTER

Welding & Fabricating Co.

2880 NORTON AVENUE, LYNWOOD, CALIFORNIA

NEwmark 1-9357 or NEvada 6-2839

Refrigeration...A faster run made it feasible to reduce prices



Meat is hung from swinging racks to allow complete circulation of chilled air throughout the load.

tremely high, to the point that the beef could be distributed only to exclusive jobbers, delicatessens, hotels, restaurants, and other institutions that were able to get premium prices for outstanding meat.

Logical answer

About a year ago, irritated at both the slow scheduled, which invited spoilage and other troubles, and the necessity for pricing its products well above the "open market," the Mapellis decided to lease a low-temperature refrigerated highway truck and explore the possibilities of handling their own distribution. With two shifts of drivers, it was found that the California market could be

reached within 48 to 50 hours, and that delivery to the customer within that space of time made it economically feasible to reduce prices. During the following months, gaining experience from day to day Mapelli realized that company ownership of a low-temperature refrigerated transport was the most logical answer.

36 to 40 hours

The result was that a huge transport is now regularly carrying 20-ton loads west from Denver to Los Angeles in from 36 to 40 hours. As shown in the photo, the huge body, built by Timpfe Brothers, Denver auto body manufacturers, has dimensions of 35 by 8 by 8 ft, and is pulled

by a 250-hp Kenworth cab-over-engine tractor with a "sleeper" built into the cab.

The body is insulated with 5 in. of "dry zero" in the sides, 4 in. in the floor, and 6 in. in the top. This permits the cell-contained refrigeration unit to maintain a temperature of from 30° to 35° for fresh meat shipping, and from 0° to 10° for frozen meats, both of which are regularly carried on H. Mapelli and Sons manifests.

Refrigeration is provided by a Thermo-King RL-10 compressor, driven by a propane engine from a 60-gal. tank mounted half way back along the trailer's underframe. The decision to utilize propane was based on its high safety factor, and low engine maintenance costs. Sixty gallons is adequate to provide sub-zero refrigeration from Denver to Los Angeles and more than half of the way back again, according to Gene Mapelli.

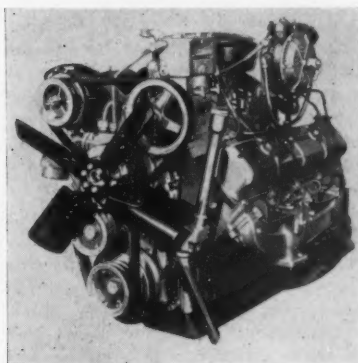
"Swing racks"

Unique features in the interior of the 35-ft body include overhead "swing racks," suspended rods for meat hooks which are mounted on swivel connections, down the full length of the body. This permits sides and quarters of beef, suspended from the overhead racks, to be more easily pushed out of the way, for unloading specific orders, as well as minimizing the strain of jars and jolts, sideways swing, etc., out on the rough highways of the desert and mountain states.

Deluxe features in the truck design include a gray overall paint job trimmed with touches of bright red, stainless steel bumpers, polished stainless steel wheels, extra lighting, and a 5-in. exhaust stack in chromium, which helps to make the Mapelli rig a valuable "rolling billboard."

The truck, on the road, is operated by two extra drivers who are likewise qualified meat experts, and who check the load at regular intervals to insure smooth, even maintenance of the temperature within. Built at a cost of \$35,000, the big truck has proved the ideal "bridge" between the rich Colorado feeding lots, and a beef-hungry California market. ■

Power news



Reo Gold Comet V-8 220-hp truck engine designed for use with LPG.

Reo's heavy-duty truck boosts sales volumes

Sales volume for Reo Motors Inc. for the first nine months of 1955 exceeded 1954 sales for the same period by 53%, according to an announcement by John C. Tooker, president. September sales were 94% ahead of the previous September.

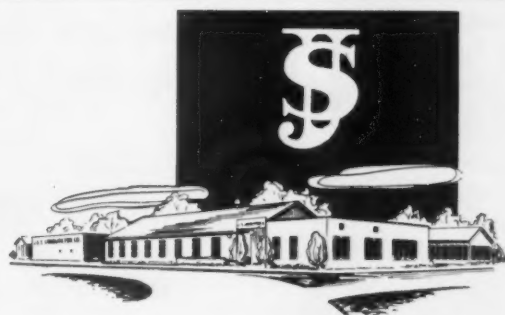
Among the reasons given for this sharp expansion was the development late in 1954 of the company's V-8 220-hp heavy duty truck, in which the engine was specially designed for use with L. P. gas. Sales of this truck now account for 34.9% of the company's total production. This 440-cu in. engine is also being sold extensively for repowering trucks of other makes, and for heavy industrial applications such as pumping for irrigation and on oil wells.

The Reo tractor with the 440-in. engine and factory-equipped LPG fuel system is also widely used as the power unit for LPG and anhydrous ammonia transports.

Bus maintenance costs \$1,654,000 less on propane

Maintenance costs of propane buses in the Chicago Transit Authority fleet are less than half as high as similar charges against the diesel buses in the same operation, according to the figures released by the Authority. The CTA fleet now includes more than 1000 propane buses, and nearly 800 each of diesel and gasoline powered vehicles.

It may be pointed out that relative age has some influence on the cost of maintenance, but it would not ac-



IN TEXAS

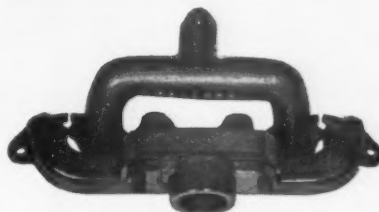
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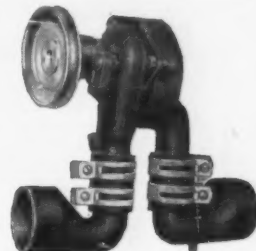
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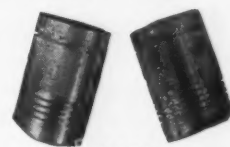
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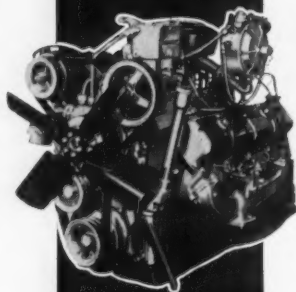
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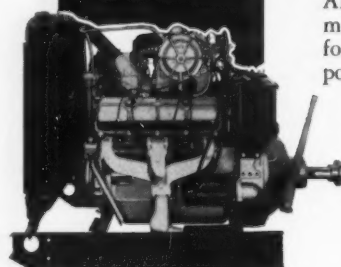
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REO V-8 TRUCK
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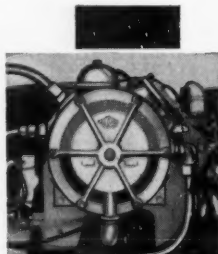


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count for such a wide differential as is shown in the figures, as many of the propane buses are now in their third or fourth year of service, by which time it is expected that the maintenance curve should reach an approximate level that it should hold fairly closely for the next several years. The diesel and gasoline buses are all older than the propane buses, as all new vehicles purchased by the Authority during the past five years have been LPG.

The figures quoted below give the direct maintenance charges for body, chassis and propulsion equipment. Apparently this is the total maintenance cost exclusive of tires, which are accounted separately. There will be some difference in maintenance cost of bodies and chassis components between the different makes of buses included in the fleet, but the largest variable should be the engine maintenance costs. The figures cover an impressive mileage—certainly enough to establish that there has been no selection to favor any one type of vehicle.

CTA Bus Maintenance Cost

| | Million miles | Cost per mile, ¢ |
|----------------|---------------|------------------|
| Diesel | 23 | 9.92 |
| Gasoline | 28 | 7.87 |
| Propane | 32 | 4.75 |

The saving compared with diesel does not sound like much when one says "5.17 cents per mile," but when multiplied by those 32 million miles it becomes really impressive—\$1,654,400. Likewise, we can figure what they did not save because they were still operating diesel and gasoline buses. These figures are \$1,189,100 for the diesel fleet, and \$873,600 for the gasoline vehicles—an impressive total of \$2,062,700. Adjusted for the age of the vehicles, it might not total quite that much, but it still "ain't hay."

Alabama LPGA appoints carburetion committee

The board of directors of the Alabama LPGA has appointed a carburetion committee consisting of the following men: Leckie Maddox, chairman; R. R. Moulden, Harry S. Pond, Willie DeArmond, Maldo Johnson, Matt Dial, and Frank Hughes.

This step was taken in response to widespread dealer demand, reflected through the projects committee which proposed to expand the service schools now conducted by the association to utilize an extra day on carburetion.

After due consideration it was

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deemed advisable to plan for a separate school for more thorough coverage of the subject, and for the benefit of the industry employees, fleet maintenance men and others specifically interested in LPG carburetion. The committee was requested to come back with a complete plan for the school, including subject matter, instructors, dates and locations of the various sessions.

Kansas carburetion school to offer five major topics

The fifth district L. P. gas carburetion school will be held Jan. 16-18 at Kansas State College in Manhattan, Kan.

The school has been divided into five major topics: Theory, practical, economic, future, and experience. With enrollment limited to 100, and the group divided into four sections, there will be ample time for individual help.

Under theory, students will attend discussions on the principles of the internal combustion engine, combustion characteristics of engine fuels, and principles of L. P. gas carburetion.

The practical section will cover pre-conversion check, tuning and adjustment of an L. P. gas tractor, safe handling and fuel transfer, and service and maintenance of L. P. gas carburetion equipment.

How to sell the farmer on converting his tractor to LPG, comparative cost of LPG with other fuels, and how not to oversell or "gas is the safest fuel" will be subjects of the economics section.

The final two sessions on the future and experience will cover the future of LPG in new farm equipment, new and future uses of LPG, a farmer's experience with LPG as an engine fuel, a serviceman's experience with LPG, and a clinic on operational problems.

The fee is \$15 for the school, which is conducted by the Kansas State College Department of Agricultural Engineering in cooperation with the LPGA.

Sodium cooled exhaust valves supplied by Ford

Ford Truck Division is now supplying sodium cooled exhaust valves for its heavier truck engines of 279- and 317-cu in. displacement and vintages of 1952-1955.

The sodium-cooled exhaust valve has a cavity in the head which connects with a hollow extending most of the length of the stem. A small

2500 TANKS NOW IN STOCK

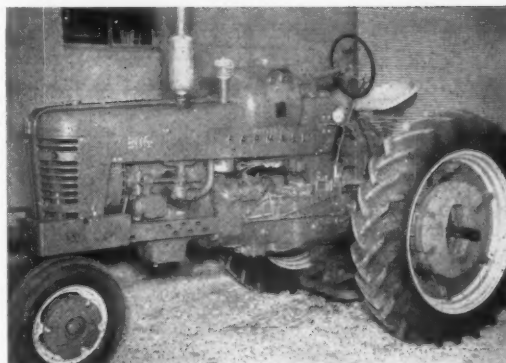
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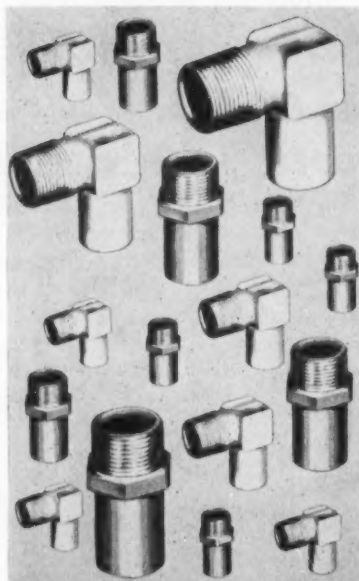


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Cylinder Head and Valve Assemblies

| Part Name | Part Number | Cu. In. Engine |
|----------------------------------|-------------|----------------|
| Cylinder head..... | B5Q-6049-D | 279 |
| Cylinder head..... | B5QH-6049-D | 317 |
| Standard exhaust valve..... | B5Q-6505-A | 279 and 317 |
| 0.003-in. O/S exhaust valve..... | B5Q-6505-B | 279 and 317 |
| 0.015-in. O/S exhaust valve..... | B5Q-6505-C | 279 and 317 |
| 0.030-in. O/S exhaust valve..... | B5Q-6505-D | 279 and 317 |
| Valve spring retainer..... | B5Q-6514-A | 279 and 317 |
| Valve spring retainer lock..... | B5Q-6518-A | 279 and 317 |
| Exhaust valve stem cap..... | B5Q-6550-A | 279 and 317 |

CAUTION — Sodium-cooled valves should never be cut or broken open. Serious burns will result if the sodium or its oxide contacts the skin. When sodium contacts water, a violent chemical reaction takes place which results in fire and explosion. Sodium-cooled valves must not be discarded with other scrap metal. They should be disposed of by deep burial in ground that is not likely to be dug up, or by dropping into deep water where there is no chance that they will be brought up.

amount of metallic sodium is sealed into this cavity during manufacture. The sodium melts as the valve heats up, and the motion of the valve throws it up and down the hollow stem. The molten sodium absorbs heat from the valve head and dissipates it through the valve stem and guides, thereby causing the valve head to run cooler and the valve stem to run hotter. (In the conventional valve very little heat is transferred through the stem—most of the cooling takes place through the seat.) Because of the higher valve stem temperature it is advisable to use high detergency engine oil.

The stems of sodium-cooled valves are larger in diameter than conventional valves, so a cylinder head change was necessary to accommodate the new Ford valves. The valve stems are made in the customary range of oversizes. Above is the parts list for the new valves, heads, and valve accessories.

Power sweepers latest units changing to propane

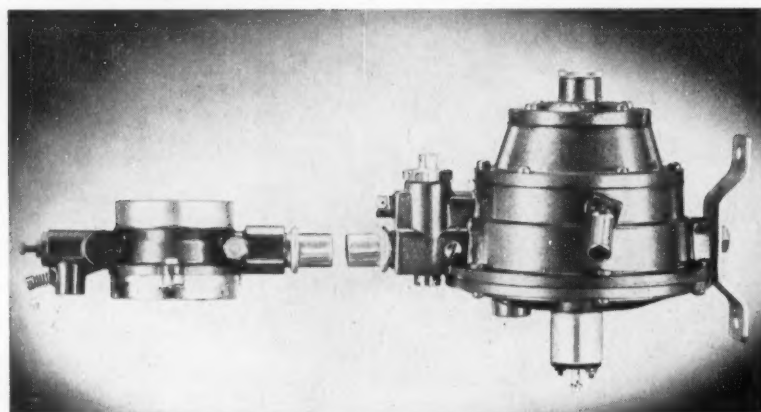
The change to propane as fuel for engines operating indoors, such as fork lift and industrial tow trucks, is continuing throughout the country in epidemic proportions. The latest indoor powered units to be reported are power sweepers. General Motors' big assembly plant at Southgate, Calif., is reported to be using five of these backache savers, with very satisfactory results. These particular sweepers were made by Wilshire Power Sweeper Co., Glendale, Calif. This company is now accepting orders for new machines with factory-installed LPG equipment.

American Liquid Gas Co. reports that Wayne Power Sweeper Co., of Pomona, Calif., has sold a number of factory-equipped street sweepers to cities.

Dix Manufacturing changes name and ownership

Dix Manufacturing Co. changed ownership and name recently when C. J. Corlett purchased the company from previous owners. Operating as Dix Carburetor Co., the new organization is located at 6605 S. Wilson Ave., Los Angeles 1, Calif.

Under new management, Dix Carburetor joins Nubert Machine Co. as a subsidiary of Corlett Metals. As head of this organization, Mr. Corlett is not new to the LPG carburetion field, having been active in the production of aluminum castings and machine work for several of the lead-



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ing L. P. gas carburetor manufacturers since 1939.

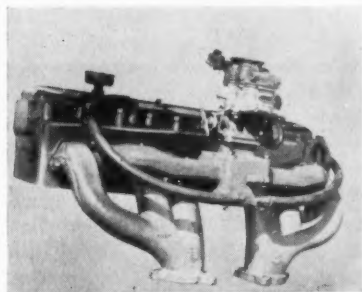
An addition to existing manufacturing facilities is under way with the construction of 3200 sq ft of new building to be used in the production of Dix carburetors. The new management states production will go forward on an increased scale with plans being made for continued improvement of the unit.

Much of the same shop and engineering staff that produced the Dix carburetor in the past will be employed by the new company. A new sales organization is planned for stepped up sales of the unit throughout the U. S. Mr. Corlett states that all former Dix distributors and dealers will receive every consideration under the new management.

Nicson Engineering offers dual LPG exhaust headers

Nicson's special dual exhaust headers offer the opportunity for complete cooling of intake manifolds on converted GMC engines of 228- through 302- cu in. sizes, and International engines from 361- through 501-cu in.

Used in connection with a pair of stock or straight-through mufflers, these headers offer lower restriction, which, according to the manufacturer, provides more power, longer exhaust valve life, lower engine operating temperatures and additional gas mileage. The stock headpipes and flanges may be used to connect the headers to the exhaust system. Material is cast iron, precision made for positive gasket sealing without port restriction.



Nicson dual exhaust headers for GMC and International truck engines.



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23 Gallons W.C. Tank for
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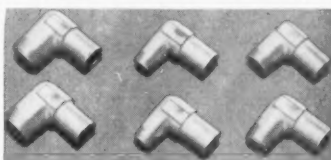
Santa Fe ENGINEERING & EQUIPMENT CO.



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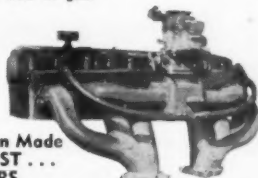
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No longer is it necessary to use many miscellaneous parts to make up ONE-ELBOW combination. With these Hose Connectors, ONE FITTING does the job. Manufactured of high grade, heat-treated, aluminum-alloy. Anodized to resist corrosion, designed to fit hose perfectly, machined inside to give maximum unrestricted flow of gas.



Precision Made EXHAUST... HEADERS

Designed specifically for GMC engines 228 thru 302 and International engines 361 thru 501. Provides positive gasket sealing without port restrictions. Stock head pipes and flanges used. May be used with stock or dual intake manifolds. Provides longer exhaust-valve life, lower engine operating temperatures, and additional gas mileage through reduced back pressure. They are burnout proof and have ample capacity.

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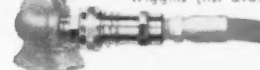
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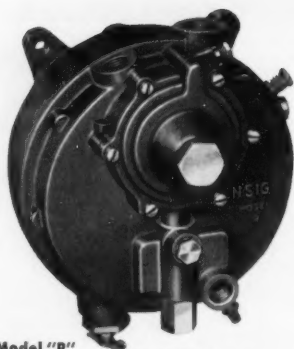
For Details on Dealer Arrangement Write:



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*Butane-Propane News Survey—January 1955 Issue

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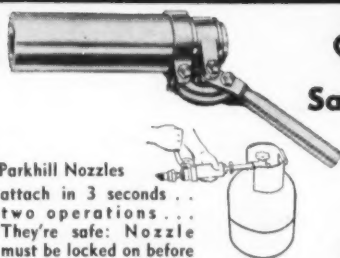
80% of "Transicold" units operate on L. P. gas

POSITIVE refrigeration control which assures arrival of perishables in the same condition in which they were loaded has been available for a considerable time through a truck refrigeration unit known as "Transicold." Improved operation of this system has been achieved through the use of L. P. gas as an engine fuel for the unit.

The characteristics of L.P. gas as a dry burning fuel resulting in elimination of carbon deposits and oil dilution are well known in conventional internal combustion engines. With the operation of the Hercules engine which powers the Transicold unit, these same advantages are multiplied several times because the engine operates at a much slower speed than the ordinary truck or car power package. Thus an excessive combustion chamber deposits are produced unless the engine is operated on a white or non-leaded gasoline. This is sometimes difficult to procure, but even cleaner results are obtained when the engine is running on L.P. gas.

As a result, practically 80% of all Transicold units manufactured are factory-equipped for L.P. gas operation. Working in cooperation with Transicold engineers, American Liquid Gas Corp. developed a special Algas L.P. gas carburetor to meet Transicold requirements. The unit is only 3 3/8-in. high with a 1/2-in. SAE flange size and an airhorn OD of 1 1/8-in. This carburetor is used in connection with a model 1900E Algas converter to provide an economical L.P. gas carburetion system for the Transicold refrigeration plant.

The Transicold system is designed for 35- and 40-ft trailer units which are used primarily for long distance hauling of all types of perishables. A feature of the system is a specially designed Transicold generator which provides AC current for the electrical circuit. Only electric and direct drive is used. All belts have been eliminated. Temperature is controlled by speed modulation, and automatic starting equipment and extra batteries have been eliminated.



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They're safe: Nozzle
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No Cold Burns!

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POSITION WANTED. Undisplayed rate is one half of above rate, payable in advance.

DISCOUNT OF 10% if full payment is made in advance for four consecutive insertions of undisplayed ads.

HELP WANTED

WANTED: TECHNICAL WRITER. WE need a technically trained man under 35 for the editorial staff of BUTANE-PROPANE News. He should have a background of mechanical engineering and experience in LPG or Gas Operations—with emphasis on equipment. He should be able to write clearly and cleanly and have done some work in preparing reports. He should have an inquisitive mind and like to probe into the "Why" of things, and be able to explain to others what he has found out. Experience in magazine or newspaper production as well as photography is desirable, but not essential. Duties will include field trips to gather data for original articles. Application by letter only. Send details to: BUTANE-PROPANE News, 198 So. Alvarado St., Los Angeles 57, Calif.

DISTRICT MANAGERS WANTED

Openings for three district managers in mid-western state, experienced in propane operations. Applicants must be capable of handling all phases of propane operation, including promotions, sales, operations, etc. Please give details of propane experience, education, etc., in first letter. Applicants reply to

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BUTANE-PROPANE News

198 So. Alvarado Street
Los Angeles 57, Calif.

SITUATIONS WANTED

POSITION WANTED: GRADUATE ENGINEER, married, three years varied LPG experience including sales, service, installation of equipment and knowledge of pressure regulating equipment. A responsible and challenging position desired with an aggressive company. Prefer Southern California or Northeastern United States location. Reply Box No. 2, BUTANE-PROPANE News, 198 So. Alvarado St., Los Angeles 57, Calif.

BUSINESS OPPORTUNITIES WANTED

WANTED TO BUY: SMALL CYLINDER business S.E. Wisconsin. Must own own cylinders. Reply Box No. 8, BUTANE-PROPANE News, 198 So. Alvarado St., Los Angeles 57, Calif.

WANT TO BUY a Bulk Plant or BOTTLED GAS BUSINESS?

A classified ad in BUTANE-PROPANE News will bring quick results at a minimum cost. Box 145 got 28 replies to his \$11 ad—less than 40¢ a reply!

BUSINESS OPPORTUNITIES OFFERED

WANTED: OPERATORS FOR L. P. GAS plant. We furnish and install, finance all bulk plant equipment on your ground, will make lease with option to purchase. McNamar Boiler & Tank Company, Box 868, Tulsa, Oklahoma. Phone CH 2-6291.

FOR SALE: TEXAS BUTANE PROPANE Business—\$100,000, which is less than market value of assets. Large income. Send financial reference with inquiry. Reply Box 1220, BUTANE-PROPANE News, 198 So. Alvarado St., Los Angeles 57, Calif.

LPG BULK PLANTS. WE SPECIALIZE in petroleum properties throughout Midwest. Have number desirable plants for sale. PETROLEUM MARKETERS, 605 Produce Bank Bldg., Minneapolis, Minnesota.

FOR SALE: ESTABLISHED BULK AND cylinder business in Eastern Wisconsin. Selling for family reasons. \$50,000 will handle. Furnish references. Reply Box No. 9, BUTANE-PROPANE News, 198 So. Alvarado St., Los Angeles 57, Calif.

ACTIVE EXPERIENCED MANAGER TO invest in progressive wholesale propane plant in Northeast. Moderate capital required. Reply Box No. 10, BUTANE-PROPANE News, 198 So. Alvarado St., Los Angeles 57, Calif.

BUSINESS FOR SALE: HALF INTEREST in bulk and bottle L. P. gas business for sale. Owner must sell on account of bad health. Doing over a million gallons per year. Money maker. Reply Box No. 3, BUTANE-PROPANE News, 198 So. Alvarado St., Los Angeles 57, Calif.

COMMERCIAL GRIDDLES AND RANGES—Manufacturers' agents now selling gas ranges, gas heaters to L. P. dealers can profitably add commercial griddles and ranges. Old established popular line available. Reply Box No. 6, BUTANE-PROPANE News, 198 So. Alvarado St., Los Angeles 57, Calif.

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ESTABLISHED AND GROWING LPG BUSINESS in North Central Texas, serving 900 bulk customers. Will run approximately 600,000 gallons this year. Three delivery trucks, 40,000 gallon storage, motor fuel station and other necessary equipment. Good farming area, tractor business good and growing. Excellent expansion possibilities. Complete records available. Business will show increase over last year.

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FOR SALE—TRUCKS - TRAILERS - Cont.

TRAILER PARK SPECIAL: 750 WG PROpane tank with side cabinet and cylinder rack, space to mount scales, mounted on 1956 Chev., dual rear tires, \$2,915.00. Plumbing, meter, etc., extra. Also ideal for bulk deliveries. EASY TERMS. White River Distributors, Inc., Batesville, Arkansas.

NOR-TEX "PACKAGE UNITS" SAVE TIME AND MONEY. They earn more! They cost less! We will mount this 1400 WG U-69 Twin Delivery Unit on a new truck of your choice or on a truck you now have for only \$1,935.00 (Excise Tax paid). The unit is equipped with high flow piping. Delivers more gas in less time. Has trim skirting, P.T.O. spline jack shaft, Viking mechanical seal pump, 50 ft. filler hose and ICC lights. Painted white enamel over red oxide. Call NOR-TEX PRODUCTS COMPANY collect, C-5416, Denton, Texas.

BUYING YOUR FIRST DELIVERY TANK TRUCK? In addition to SAVING YOU MONEY, we can give you many good ideas in the operation of a bulk L. P. Gas business. Our years of experience as a retail gas dealer have assisted many new dealers who purchased their first delivery truck from us. WHITE RIVER DISTRIBUTORS, INC. Phone 570, Batesville, Arkansas.

FOR SALE: 1564 GALLON, TWIN BARREL Propane Truck mounted on 2½-ton Dodge WJ58, Ensign carburetor, skirted, side compartments, fuel tank, Smith T3 pump, fire extinguisher, 50' hose. Ready to deliver gas. \$1500.00. National Butane Gas Co., Geneva, Ill.

DELIVER MORE GAS IN LESS TIME... with 1800 WG U-69 Nor-Tex Twin Delivery Unit equipped with high flow piping. For only \$2,194.80 (including tax) it can be mounted on your choice of truck or on one you already have. Trim skirting, ICC lights, Viking mechanical seal pump, P.T.O., spline jack shaft and 50 ft. filler hose. Call NOR-TEX PRODUCTS COMPANY collect, C-5416, Denton, Texas.

PROPANE DELIVERY TRUCK

Brand new, 1956 Chevrolet chassis and 1200 WG twin or single tank, piped complete with Viking mechanical seal pump, P.T.O. shaft, 50' filler hose, painted, with lights. READY TO USE, including Fed. Excise Tax, ONLY—

\$3,678.00 — 25% Down
Balance 24 Months

Other sizes of new tanks, with or without chassis, 600 to 2300 WG. Several late model USED PROPANE TRUCKS, 1100 to 1800 gal. in stock.

WHITE RIVER
DISTRIBUTORS, INC.
Batesville, Arkansas
Phone 570

CLASSIFIED Advertising



FOR SALE - TRUCKS - TRAILERS - Cont.

FOR SALE: 1950 1½-TON CHEV. WITH 1,080 gallon Bagwell propane tank, Viking pump, Pittsburgh meter, or 1950 2-ton Ford with 1,000 gallon R. D. Cole propane tank, Viking pump, Neptune meter, both motors good condition, some tires have been recapped—others have not—all have good tread, trucks delivering gas daily. Your choice \$2,000.00. B & W Gas Company, Royston, Georgia. Phone 8044.

FOR SALE: DELIVERY TRUCK, 1500 gallon single or double barrel units, plumbed Viking KK200 pump, PTO, 50 ft ¾-in. hose, 50 ft ½-in. hose, directional lights, mounted on new two-ton Chevrolet truck and ready to pump gas at only \$4875.00, Federal Tax paid. 25% down and up to thirty-six months to pay. McNamara Boiler & Tank Company, Box 868, Tulsa, Oklahoma. Phone CH 2-6291.

DO YOU WANT—BIG HAULS WITH FAST DELIVERY? New 2,000 WG twin propane Model 150 (large DeLuxe cabinets on each side) delivery unit with hi-flow piping, Viking 70 GPM mechanical seal pump, PTO, shaft, piped complete, painted with ICC lights, 50 ft. 1 in. filler hose and mounted on NEW 1956 Chev. Model 6403 chassis with 2 speed, HD springs, BIG ENGINE, at ONLY \$4935.00 Fed. Excise Tax Paid. Meter and other accessories available. 1956 Internationals, G.M.C.'s, Dodges, and Fords also available. WHITE RIVER DISTRIBUTORS, INC., Batesville, Arkansas.

HURRY! TRANSPORT SPECIAL! 1951 International Harvester. Chassis L-190. Tractor in A-1 condition with Ensign carburetion. Two 73 gallon propane fuel tanks. Twin 5500 WG capacity U-69 Trinity Steel tanks. Reyco tandem. Extra good 12-ply tires, 10:00 x 20 with two extra spares and wheels. Complete \$7,250.00. Call NOR-TEX PRODUCTS CO., Collect, C-5416, Denton, Texas.

TRANSPORTS: SINGLE OR TWIN barrel; new or used; for lease, or sale on budget or rental sale plan. If you want maximum payload, with all of the latest equipment engineered to fit your truck, roads, and your hauling problem, get the LMC PAYLOADER.

Contact Lubbock Machine & Supply Co., Inc., Drawer 1589, Lubbock, Texas.

IMMEDIATE DELIVERY PROPANE TRANSPORT

New 6100 Gal. Single Barrel Tandem Axle, 10:00x20 tires, air brakes.

New 5700 Gal. Twin Transport Tandem Axle, air brakes, 10:00x20 tires.

New 7200 Gal. Single Barrel Tandem Axle, air brakes, 10:00x20 tires.



ARROW EQUIPMENT COMPANY, INC.

635 Hernando Street

P. O. Box 2682

Memphis, Tennessee

FOR SALE - TRUCKS - TRAILERS - Cont.

THREE USED PROPANE SEMI-TRAILERS for sale. Single axle, twin barrel, 4800 gallon W.C. Cargo tanks constructed in accordance with A.S.M.E. Code, Par U68, 200 P.S.I. working pressure. \$4,000 each. Reply Box No. 4, BUTANE-PROPANE News, 198 So. Alvarado St., Los Angeles 57, Calif.

EASY TERMS AVAILABLE ON ALL NEW or used propane units. We carry our own paper—no red tape involved. 5 Models of twin or single truck tanks in sizes from 600 to 2300 WG available. You may furnish your own chassis or we have any make or model NEW 1956 Model truck available at prices that really SAVE YOU MONEY. FAST DELIVERIES. WHITE RIVER DISTRIBUTORS, INC. Phone 570, Batesville, Arkansas.

DELIVERY UNITS: SINGLE OR Twin Barrel. Our prices are competitive. We invite comparison between the equipment and price on our units with any competitive units. We believe we can give you the highest payloads per pound of gross vehicle weight. Write, wire, or phone, Lubbock Machine & Supply Co., Inc. Drawer 1589, Lubbock, Texas.

FOR SALE: 5000, 5500 and 6000 gal. W.G. U69 Tandem Propane Twin Barrel Trailers. Choice of 16 with 50% 10:20 tires, air brakes. Now operating. Texas R.R. Commission, ICC, ASME approved. Delivery will be made to most northern cities for \$200. Write for pictures, details. IRVIN F. NELIS ASSOCIATES, P. O. Box 14472, Houston 21, Texas.

FOR SALE — TANKS - CYLINDERS

SKID TANKS

— IN STOCK NOW —

3000 gallon size built especially rugged for oil field use. Write, wire or phone

Lubbock Machine & Supply Co., Inc.

P. O. Drawer 1589

Lubbock, Texas

ABOVE GROUND PROPANE SYSTEMS

We manufacture a complete line of above ground propane tanks, approved for all states, in sizes ranging from 115 W.G. to 1,000 W.G. Free delivery within our trade territory, and financing of all types available.

WRITE FOR PRICES.

WHITE RIVER DISTRIBUTORS, INC.

Batesville, Arkansas

Phone 570

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FOR SALE: ICC 26-150 (RESTAMPED TO ICC 26-300) 88-lb. propane capacity cylinders 13" ID x 45". Average weight 123#. Complete with 3104CO wrench type valves and caps. Good condition. Attractively priced at \$4.50 F.O.B. Midwest points. Write for details and complete specifications. Address: CYLINDERS, P. O. Box 436, Kansas City 41, Missouri.

OVER 2000 TRACTOR AND MOTOR FUEL TANKS CURRENTLY IN STOCK

Write for WEEKLY stock lists.

WESTERN TANK & STEEL CORP.

Box 1013

Lubbock, Texas

FOR SALE

6000 W.C. STORAGE TANKS, USED, completely fitted, J. B. Beaird, manufactured 1954.

O'CONNOR GAS CORP.

Fond du Lac, Wisconsin

STORAGE TANKS

Available Immediately

In the following capacities: 1000, 2000, 3000, 5000, 6000, 8000, 10,000, 15,000, 18,000 and 20,000. Your choice of 46" to 96" diameter. Write, wire or call Lubbock Machine & Supply Co., Inc., P. O. Drawer 1589, Lubbock, Texas.

FOR SALE—MISCELLANEOUS

DECALS MADE FOR TRUCKS, EQUIPMENT. Small or large quantities. Catalog free. Mathews Co., 827 S. Harvey, Oak Park, Ill.

FOR SALE—IMMEDIATE DELIVERY! Eureka Smokehouse Burner Assemblies! For meat smoke houses using bottled gas. Completely automatic. Clean filtered smoke. Distributes heat uniformly. Low gas consumption. Automatic temperature and pilot control. Less product shrinkage. Easily installed. Write for descriptive pamphlet. Eureka Equipment Company, P.O. Box 396, Beloit, Wisconsin.

SERVEL REFRIGERATORS CLEAN — ALL CHECKED OK
Model M500A.....\$15.00 each
Model N500A.....\$18.00 each

In lots of 12 or more.

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Est. 1918

REgent 9-1130

SERVEL GAS REFRIGERATORS

S600A, with CROSS-TOP FREEZER

(6 cu. ft.) @ \$46.00

BN600A 6 cu. ft. @ \$46.00

S400A 4 cu. ft. @ \$28.00

R400A 4 cu. ft. @ \$22.00

Used: guaranteed in good operating condition. Modern, attractive, excellent condition. Minimum shipment 12. Low delivery cost anywhere. Send for illustrated folder NOW and be ready for your Spring selling season.

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Phone Flushing 7-6161

CLASSIFIED Advertising



WANTED — MISCELLANEOUS

WANTED: USED 100# CYLINDERS AND Hackney 60# cylinders. Furnish photos and all data. Reply Box 11, BUTANE-PROPANE News, 198 So. Alvarado St., Los Angeles 57, Calif.

WANTED: USED TRUCK METER AND hose reel. Also used bulk plant equipment. We need pumps, compressors, unloading and filling equipment. Small steel buildings. Let us know what you have. State price, quantity and condition. Hayfield Hardware Store, Hayfield, Minn.

WANTED: USED 1200 GALLON SINGLE barrel propane truck, condition of chassis not too important. Lakes Gas Co., Spirit Lake, Iowa.

MISCELLANEOUS SERVICES

BUSINESS RECORD FORMS. ALL-WEATHER EZE-SNAP delivery invoices, for use when making LP gas metered truck deliveries. 1000 sets (3 part) imprinted with name, address and telephone. \$17.50 per 1000 sets. DEGREE DAY SYSTEMS, WOODSIDE 77, L. I., N. Y.

CLIENTS OFTEN INCREASE PROFITS 2% or more by using my cost reducing bulk and bottle operating procedures and sales procedures. Property evaluations and special assignments also handled. Floyd F. Campbell, Management Counselor, 821 Crofton Ave., Webster Grove 19, Mo.

PROFESSIONAL SERVICES

INDIVIDUALLY DESIGNED Ammonia and LP Gas Plants

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& Assoc., Inc.
Westfield, N. J.

LP GAS INSTALLATIONS and ANHYDROUS AMMONIA PLANTS DESIGNED AND INSTALLED

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Paul E. Peacock, Jr., Pres.
Box 268, Westfield, N. J.

L. P. GAS INSURANCE

Have your agent write us about our Complete and Comprehensive Coverage for Adequate Limits of Liability at Reasonable and Normal Rates with Specialized Safety Engineering and Claim Service. Available only in Alabama, Arkansas, Arizona, Georgia, Kansas, Louisiana, Mississippi, New Mexico, Oklahoma and Texas.

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Earl W. Gammage, President
P.O. Box 1662 Houston, Texas

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TO SELLERS — Sales Reports, Accounting Reports, and Engineering Services to sell your business with no cost to you. TO BUYERS — We are able to give you ALL the facts regarding the LP Gas businesses we have for sale. Write us or call collect.

FEDERATED PETROLEUM SERVICES, INC.

Sales Office: Accounting Office:
218 West Mifflin St. 300a Broadway
Madison, Wisc. Hannibal, Mo.

SELL MORE WITH DISPLAY CLASSIFIED ADS

This is an example of the attention getting type faces available in display ads in the BPN Classified Section. Cost is only \$12.00 a column inch per issue, an ad this size (3") is \$36.00. The large lines above are set in 18 pt. Other available sizes are shown below.

14 POINT DISPLAY 12 POINT DISPLAY 10 POINT DISPLAY

Body type is set in 7 pt like this sample. An average of 7 words to the line.

Haar delivers heater halfway around world!

HENRY HAAR, of Acme Butane & Appliances, Fresno, Calif., is still shaking his head over the odd circumstances surrounding his recent shipment of one Dearborn heater to Tel Aviv, Israel. It happened this way:

Henry received a call from a local attorney who reported that his daughter, who is married to an official in Tel Aviv, had gone over to join her husband, and she missed the comforts of home. In short, the little girl was cold, and she wanted her father to do something about it. And papa was willing to help, particularly when it was shown that it was not possible for the merchandising firms in Israel to import such items as ranges, water heaters and similar appliances for resale. They have a law which protects the local sheet metal benders against foreign competition. But an indi-

vidual may import one each of any such items for personal use. It is also possible to secure L. P. gas in 20-gal. cylinders. The gal wanted to put one and two together, and make warmth.

Henry booked the order for one Dearborn heater, price \$39.95, to be crated and delivered by the most expeditious means to the daughter in Tel Aviv. From here on, let's follow the heater.

It was manufactured in Dallas, shipped to a warehouse in San Francisco, from which it was delivered to Acme Butane in Fresno, complete in a corrugated cardboard package. Around this Henry built a snug fitting wooden crate, using good 1-in. pine lumber. This was bound with 3/4-in. steel straps as required by the export shipping regulations. The complete package was delivered to Acme Fast Freight, the only concern in the area that takes L.C.L. fast freight to New York City. After that things were no longer direct and simple.

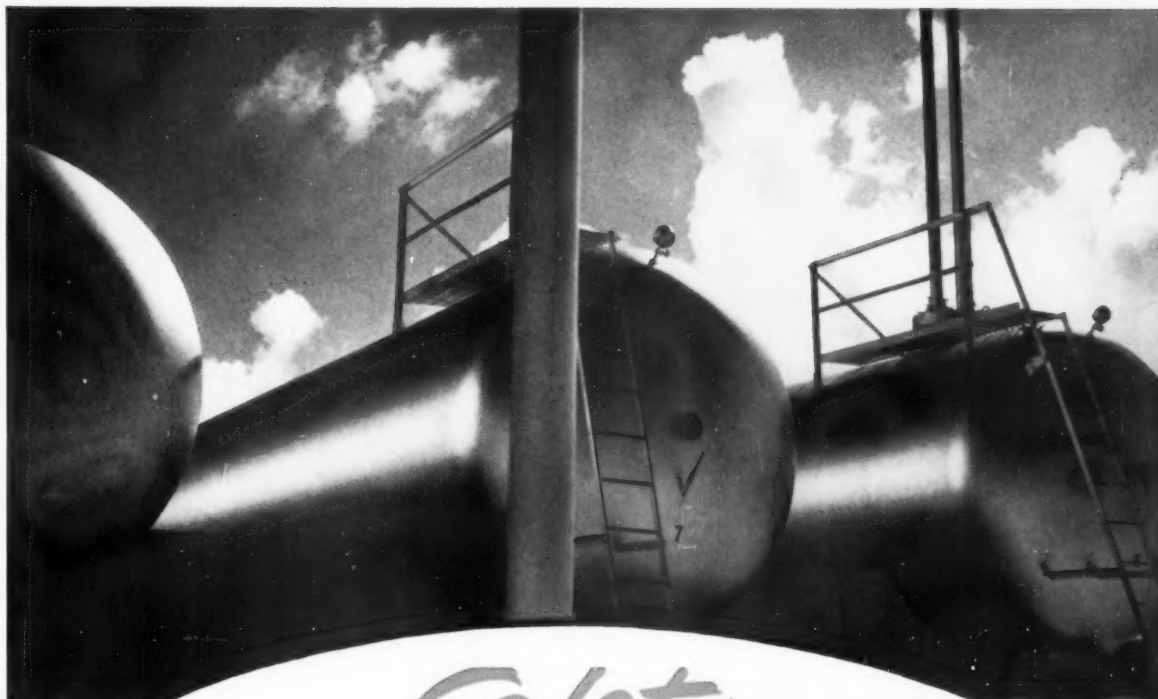
The Fresno attorney turned the deal over to an export brokerage firm in San Francisco, which arranged to have another export brokerage firm in New York accept delivery from Acme Fast Freight. This firm reshipped the heater, via the SS *Exermont*, to its correspondent in Tel Aviv, who cleared the shipment through the Israel customs and arranged for final delivery to the girl.

Compilation of the costs to all the brokers and transportation companies involved—none of whom could make direct shipment—adds up to approximately \$85, not including the intrastate and transcontinental telephone tolls and the wear and tear on Henry Haar. But one Dearborn heater has traveled a distance of nearly halfway around the world to get from Dallas to Tel Aviv to bring a touch of American comfort to a girl recently transplanted from Fresno to Israel. And Acme Butane shows a distinct bulge to the east. ■

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| | | | | | |
|------------------------------------|-------------|------------------------------------|---------|------------------------------------|--------------|
| *ACF Industries, Inc. | Third Cover | Gas Machinery Co. | — | *Quaker Mfg Co., | — |
| Adams Bros. Mfg. Co., Inc. | — | General Controls Co. | — | Div. of Florence Stove Co. | — |
| *American Liquid Gas Corp. | 150 | General Electric Co. | — | Radio Corp. of America | 132 |
| *American Metal Products Co., Inc. | — | Electronics Div. | 91 | *Ransome Corp. of America | — |
| *American Meter Co., Inc. | — | *General Gas Light Co. | 115 | Rector Well Equipment Co. | — |
| Reliance Regulator Div. | — | General Motors Co., | — | Reliance Regulator Div., | — |
| *American Pipe & Steel Corp. | — | Chevrolet Motor Div. | — | American Meter Co. | — |
| *American Radiator & Standard | — | Griffiths, E. F. Co., The | 102 | Remington Rand, Inc. | — |
| Sanitary Corp. | — | Grinnell Co., Inc. | 123 | Reo Motors, Inc. | — |
| *Sunbeam Air Conditioner Div. | 8, 9 | Gulf Oil Corp. | 61 | Republic Heater Corp. | 6, 7 |
| *American Tank & Mfg. Co. | 83 | Handbook Butane-Propane Gases | 137 | Reznor Mfg. Co. | 110 |
| Anchor Coupling Co. | — | Hannay & Son, Inc., Clifford B. | 69 | Rheem Mfg. Co. | — |
| *Anchor Petroleum Co. | Front Cover | Hardwick Stove Co. | 117 | Richardson Gasoline Co., Sid | 53 |
| *Anco Mfg. & Supply Co. | — | Harper-Wyman Co. | 12, 13 | Ridge Tool Co., The | — |
| Anderson & Forrester | 94 | Hewitt-Robins, Inc. | — | Robertshaw-Fulton Controls Co., | — |
| Anthony Co. | — | Holly Mfg. Co. | 136 | Grayson Controls Div. | — |
| *A-P Controls Corp. | 135 | Imperial Brass Mfg. Co. | — | Robertshaw Thermostat Div. | — |
| Armco Drainage & Metal | — | Industrial Mfg. Co. of Texas, Inc. | 96 | *Rockwell Mfg. Co., | — |
| Prod., Inc., Div. of Armco | — | International Harvester Co. | — | Pittsburgh Equitable Meter Div. | — |
| International Corp. | — | *J & S Carburetor Co. | 149 | Rockwood Sprinkler Co., | — |
| *Bagwell-General Steel Co. | 126 | Janitrol Heating & Air Cond. Div., | — | Ball Valve Div. | — |
| *Bastian-Blessing Co., The | 50, 51, 150 | Surface Combustion Corp. | 107 | Roney, Inc. | — |
| Beacon Petroleum Co. | 58 | *Johnson Gas Appliance Co. | 92 | Roper Corp., George D. | 16, 17 |
| *Beaird Co., Inc., The J. B. | 67, 68 | Johnson Machine Shop | 149 | Ruud Manufacturing Co. | — |
| Beam Products Mfg. Co. | 142 | Krug, D. H. Co. | — | Sante Fe Engineering & | — |
| *Bendix Aviation Corp., | — | *Linde Air Products., Div. of | — | Equipment Co. | 153 |
| Zenith Carburetor Div. | 145 | Union Carbide & Carbon Corp. | 89 | Scaife Co. | 97 |
| Binders for BPN | 131 | Locke Stove Co. | — | *Selwyn-Pacific Co. | 112, 113 |
| *Birmingham Stove & Range Co. | — | *LPG Credit Corporation | — | Sheffield Bronze Paint Corp. | — |
| *Black, Sivalis & Bryson, Inc. | — | LPG Leasing Corp. | 119 | Shell Oil Company | — |
| Blue Co., John | 104 | Lubbock Machine & Supply Co. | 101 | *Sinclair Oil & Gas Co. | 81 |
| *Bowser, Inc. | — | Lun-Dow Co. | — | Skelly Oil Co. | — |
| Brown Stove Works | — | Magic Chef, Inc. | — | Smith Corp., A. O., Permaglas Div. | — |
| Broyhill Mfg. Co. | 94 | Manchester Welding & | — | *Smith Precision Products Co. | — |
| *Brunner Mfg. Co. | — | Fabricating Co. | 147 | *Sprague Meter Co. | Fourth Cover |
| Bryant Division, Carrier Corp. | — | Martin Stamping & Stove Co. | 94 | Squibb-Taylor, Inc. | 124 |
| Buckeye Incubator Co. | — | Martin Tube Benders, W. H. | — | Star Manufacturing Co. | — |
| Butler Mfg. Co. | — | *Master Tank & Welding Co. | 71, 106 | Standard Meter Repair Co. | — |
| Calor Gas Company | — | McCabe-Powers Auto Body Co. | — | Steel Cooperage Div., | — |
| Caloric Appliance Corp. | — | McNamar Boiler & Tank Co. | 57 | Serrick Corp. | 75 |
| Carrier Corporation, Bryant Div. | — | Mettler Mfg. Div., | — | Stewart-Warner Corp. | — |
| Carter Oil Co., The | 120 | Eclipse Fuel & Engineering Co. | — | Stratoflex, Inc. | — |
| *Century Gas Equipment Co. | 141 | Milwaukee Gas Specialty Co. | 55 | Superior Industries, Inc. | 114 |
| *Charlotte Tank Corp. | 129 | Mine Safety Appliance, Inc. | — | Superior Tank Corp. | 116 |
| Chevrolet Motor Div., | — | Minneapolis-Honeywell | — | Surface Combustion Corp., | — |
| Gen. Motor Co. | — | Regulator Co. | — | Janitrol Heating-Air Cond. Div. | 107 |
| Chiksan Company | 105 | Mission Appliance Corp | — | *Tappan Stove Co., The | — |
| Cities Service Oil Co. | 85 | Mississippi Tank Co. | — | *Temco, Inc. | 14, 15 |
| Coleman Co., Inc. | — | *Mitchell Co., John E. | 139 | Texas Boiler & Machy. Co. | 125 |
| *Columbian Steel Tank Co. | 111 | Modine Mfg. Co. | 113 | *Texas Natural Gasoline Corp. | — |
| *Corken s, Inc. | 79 | Moellenbrock & Wilke | 103 | Texoil Equipment, Inc. | 140 |
| Crane Co., The | — | *Motorola, Inc. | — | *Trageser Copper Works, Inc. | — |
| Crane Packing Co. | — | *Mutual Liquid Gas | — | *Trinity Steel Co., Inc. | 4, 5 |
| Crouse-Hinds Co. | — | Equipment Co., Inc. | — | True Blue Oil Co. | — |
| Dallas Tank Co., Inc. | 109 | Nelson, Edward S., Ltd. | 102 | *Tuloma Gas Products Co. | 22 |
| Dal-Worth Tank Co. | 121 | *Neptune Meter Co. | — | *Union Carbide & Carbon Corp., | — |
| Davis Engineering Corp. | 138 | Nicson Engineering Co. | 153 | Linde Air Products Co. Div. | 89 |
| Day & Night Div., Carrier Corp. | — | Norman Products Co. | — | *United Petroleum Gas Co. | — |
| Dearborn Stove Co. | — | *North Texas Tank Co. | 10, 11 | *United States Rubber Co. | — |
| Deere, John | — | Northwest Fabricators | — | Utility Appliance Corp. | — |
| *Delta Tank Mfg. Co. | 87 | Ohio Foundry & Mfg. Co. | — | *Viking Pump Co. | 122 |
| Dix Carburetor Co. | 152 | Ohio Injector Co., The | — | Waldorf Heater Co. | — |
| *Dixie Products, Inc. | — | Orbon Stoves, Inc. | 98 | *Wallace, William Co., | — |
| Dixon Valve & Coupling Co. | 108 | Parkhill Co. | 154 | Metalbestos Div. | — |
| *Downingtown Iron Works, Inc. | — | *Pasley Mfg. & Dist. Co., The | 128 | *Warren Petroleum Corp. | 3 |
| Div. of Pressed Steel Tank Co. | 118 | Peerless Mfg. Corp. | 127 | *Weatherhead Co., The | 18 |
| Drake & Townsend, Inc. | — | Phillips & Buttorff Mfg. Co. | 100 | *Welbilt Stove Co. | — |
| Ellis Manifold Co. | — | *Phillips Petroleum Co. | 97 | Western Tank & Steel Corp. | 151 |
| Empire Oil & Refinery Co. | — | *Pittsburgh Equitable Meter Div., | — | Whitehead Mfg. Corp., D. W. | — |
| Empire Stove Co. | 133 | Rockwell Mfg. Co. | — | White Products Corp. | — |
| *Ensign Carburetor Co. | 154 | Powell Co., The William | — | White River Distributors, Inc. | — |
| First Acceptance Corp. | 130 | *Power Manifold Co. | 152 | Wiggins, E. B., Oil Tool Co. | 153 |
| *Fisher Governor Co. | 20 | *Pressed Steel Tank Co. | — | Wood, A. R. Mfg. Co. | 138 |
| *Flint Steel Corp. | 99 | — | — | Wood Co., John | — |
| Ford Motor Co. | 93 | — | — | Heater & Tank Div. | — |
| Garretson Equipment Co. | — | — | — | Woodside Industries | — |
| Valley Industries, Inc. | — | — | — | Zenith Carburetor Div., | — |
| Gas Appliance Mfrs. Assn., Inc. | — | — | — | Bendix Avia. Corp. | 145 |



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Q C f Tanks are available for L-P gas, anhydrous ammonia, and other gases or liquids under pressure. Write for complete information. Dept. B-1, AMERICAN CAR AND FOUNDRY DIVISION, **Q C f** Industries Incorporated, 30 Church Street, New York 8, N. Y.

Only **Q C f** offers all these features!

Complete Stress Relieving eliminates stresses set up during forming and welding...provides resistance to fatigue caused by temperature changes or pulsating loads.

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Steel Grit-Blasting of tank exteriors to remove mill scale, resulting in a smooth surface for primer.

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New design with the stainless steel stem assures you top protection. Check your valves now!

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